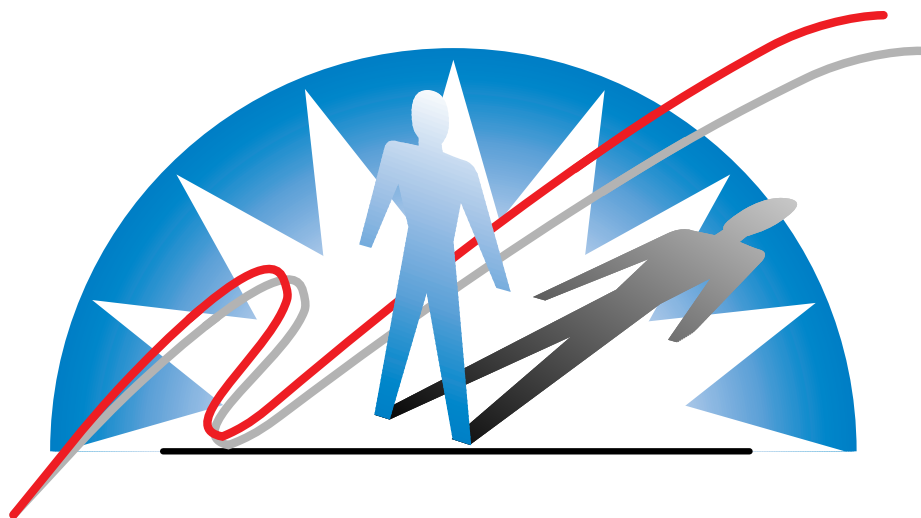


2007

Montana Youth Risk Behavior Survey Grades 7-8



Montana Office of Public Instruction

MONTANA YOUTH RISK BEHAVIOR SURVEY REPORT - 2007
FOR GRADES 7-8

**STATEWIDE ANALYSIS OF
SELECTED BEHAVIOR RISK FACTORS**

September 2007

**Prepared for
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- the co-sponsors of the YRBS -- the Montana Board of Crime Control, the Montana Department of Public Health and Human Services, the Billings Area Indian Health Service, the Montana Department of Transportation, Healthy Mothers/Healthy Babies Montana Coalition, and Blue Cross and Blue Shield of Montana;
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- the Montana students who participated in the survey.

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Introduction



I. INTRODUCTION

The Youth Risk Behavior Surveillance System is an epidemiologic surveillance system that was established by the U.S. Centers for Disease Control and Prevention (CDC) to help monitor the prevalence of behaviors that not only influence youth health, but also put youth at risk for the most significant health and social problems that can occur during adolescence and adulthood. In the United States, 71 percent of all deaths among youth and young adults aged 10-24 years result from four causes: motor-vehicle crashes (31 percent), other unintentional injuries (14 percent), homicides (15 percent), and suicide (11 percent). Substantial morbidity and social problems also result from the approximately 831,000 pregnancies that occur each year among females aged 15-19 years, the estimated 9.1 million cases of sexually transmitted diseases (STDs) that occur each year among persons aged 15 - 24 years, and the estimated 4,842 cases of human immunodeficiency virus (HIV) among persons aged 15-24 years that occur annually.

One out of every six cases (one of five in Montana) of acquired immune deficiency syndrome (AIDS) that is diagnosed in the United States occurs among those who are aged 20 to 29 years old. Since the average incubation period between human immunodeficiency virus (HIV) infection and AIDS diagnosis is ten years, a high proportion of those 20 to 29 year olds diagnosed with AIDS were infected as teenagers. HIV infection is now reported as the fifth leading cause of death among persons aged 15 to 24 years old.

Among adults aged 25 years or older, 61 percent of all deaths in the United States result from cardiovascular diseases (38 percent) and cancer (23 percent). Leading causes of morbidity and mortality among all age groups in the United States are related to the following: behaviors that contribute to unintentional injuries and violence; tobacco use; alcohol and other drug use; sexual behaviors that contribute to unintended pregnancy and STDs, including human immunodeficiency virus (HIV) infection; unhealthy dietary behaviors; physical inactivity; and overweight. Behaviors are frequently interrelated and often are established during youth and extend into adulthood. Mortality, morbidity, and social problems that teenagers encounter are largely related to a small number of negative behaviors such as drinking and driving and sexual intercourse at a young age. Tobacco use, excessive consumption of fats, and insufficient physical activity (behaviors formed during adolescence) are known to lead to diseases that are not manifest until adulthood. These behaviors and associated health problems are largely preventable.

In 1988, CDC initiated a process to identify and monitor important health behaviors among youth. The leading causes of mortality, morbidity, and social problems among youth were analyzed and behaviors contributing to these problems were identified and categorized into six risk areas: 1) behaviors that result in unintentional and intentional injuries; 2) tobacco use; 3) alcohol and other drug use; 4) sexual behaviors that result in HIV infection, other sexually transmitted diseases, and unintended pregnancies; 5) physical inactivity; and 6) dietary behaviors.

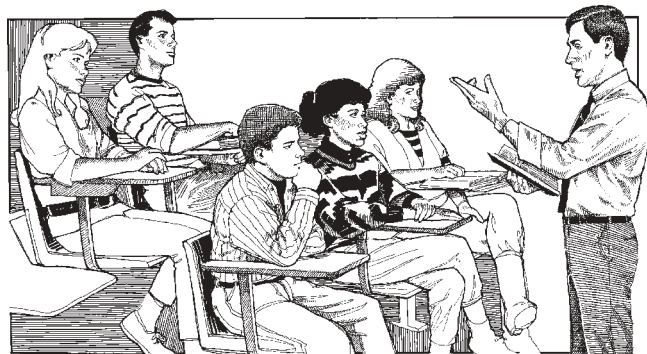
The purpose of the Youth Risk Behavior Survey (YRBS) is to assist educators and health professionals in determining the prevalence of the aforementioned health-risk behaviors among youth. This report describes the results of the survey and the methods used to conduct the survey. The results will be used to focus the continuing development of statewide comprehensive health education and to reduce those health behaviors that place Montana youth at risk.

Survey results for each of the risk factors are presented in two parts:

1. an overview of the risk factor as it applies to Montana youth; and
2. highlights of the results of the 2007 YRBS for Montana 7th and 8th grade students in bullet format.

Appendix A lists all survey questions and corresponding frequency distributions, while Appendix B contains graphs associated with the highlights presented in the text. Appendix C also contains charts of specific questions asked in the 2007 YRBS.

Survey Methods



II. SURVEY METHODS

DESCRIPTION OF YRBS

The Youth Risk Behavior Survey (YRBS) was developed cooperatively by the Centers for Disease Control and Prevention (CDC), 19 other federal agencies, and state and local departments of education to measure the extent to which adolescents engage in health risk behaviors. The 2007 survey instrument consisted of 51 questions which assessed the six priority health risk behaviors which result in the greatest amount of morbidity, mortality, and social problems among youth. These behaviors include behaviors that result in unintentional injuries and violence; tobacco use; alcohol and other drug use; sexual behaviors that contribute to unintended pregnancy and STDs, including HIV infection; physical inactivity; and unhealthy dietary behaviors.

SAMPLE SELECTION PROCESS

All public and private schools in Montana with students in grades 7 and 8 were eligible to be selected for inclusion in the sample. One hundred and thirty-four schools elected to participate in the volunteer sample and 81 percent of the students in these schools volunteered to participate in the survey. A total of 7,977 7th and 8th grade students participated in the 2007 Montana YRBS. The results presented in this report are based on the behavior and opinion of the participants in the sample; because the survey was not random it is not possible to use the results of the survey to draw conclusions about health-risk behaviors of all 7th and 8th grade students in Montana.

Superintendents of school districts were contacted during November 2006 to obtain approval to approach principals of randomly selected schools about the survey. Sufficient time was allowed to gain school board and/or parent approval, and to answer any questions about the survey. Each participating school submitted a list of second-period classes and a random set of these classes was selected and surveyed. In smaller schools, a census of students was attempted. Survey coordinators for each school were assigned by school administrators and packets of information, including instructions, survey booklets, and answer sheets, were mailed to each school during February 2007. Surveys were administered during second-period classes and returned to the Office of Public Instruction (OPI) for processing within one week of survey administration.

Teachers administering the survey to students were provided with detailed written instructions to ensure uniform survey administration across sites. To encourage accurate responses to sensitive questions, a strict protocol was implemented to **protect the privacy and confidentiality of all participating students**. Participation in the survey was voluntary. Students could decline to participate, turn in blank or incomplete survey forms, or stop completing the survey at any time. The protocols used in the YRBS ensure that participating schools are not violating any federal laws protecting students' rights and

privacy, including the Protection of Pupil Rights Amendment and the Family Educational Rights and Privacy Act (FERPA).

SURVEY VALIDITY AND LIMITATIONS

The 2007 Grades 7-8 Youth Risk Behavior Survey was not a random survey. It would not be valid to generalize the findings from this survey to all 7th and 8th grade students in Montana. It is only valid to attribute the results of this survey to the 7,977 students who reported their behaviors in response to the items in the questionnaire. In addition, respondents in self-reported surveys may have a tendency to under-report behaviors that are socially undesirable, unhealthy, or illegal (alcohol consumption, drug use, seat belt nonusage, etc.) and overreport behaviors which are socially desirable (amount of exercise, etc.).

Survey Results



III. SURVEY RESULTS

UNINTENTIONAL INJURIES AND VIOLENCE

Overview

The teen death rate reflects deaths among 15 to 19 year olds from all causes. It is worth noting that nationally, deaths from accidents, homicides, and suicides accounted for 76 percent of all deaths in this age group in 2004.¹

- Among states, Montana ranks second highest in the nation with a teen death rate of 104 deaths per 100,000 teens, compared to 66 per 100,000 nationally.¹
- In 2005, among 15 to 19 year olds in Montana, there were 60 deaths; 29 (48 percent) were attributed to accidents. Twenty, or 68 percent, of the accidental deaths were due to motor vehicle crashes.²
- Suicide was the second leading cause of death among Montana youth aged 15 to 19 years old in 2005. Eighteen (30 percent) of the 60 deaths were the result of suicide.²

Obviously, controlling or lowering the death rate due to these two causes, which account for over three-fourths of all deaths among Montana youth, would not only preserve Montana's most important resource, but also increase the social and economic well-being of the state and its population.

Ten questions were asked of participants in the survey regarding intentional and unintentional injuries (see Appendix A). Intentional and unintentional injury questions were related to personal safety, violence-related behaviors, and sad feelings and attempted suicide. Questions related to intentional and unintentional injuries were developed for middle and 7th and 8th grade students throughout the United States and, consequently, some of the questions may not relate well to youth in Montana. In particular, many Montana students may carry firearms for hunting or predator control and report that they are carrying a weapon -- even onto school property. The purpose for carrying these weapons may not have any relationship to self-protection or aggressive behavior as the survey was attempting to measure. However, this situation should not lessen the importance of firearm safety. Each year, Montana youth place themselves at risk for accidental injury or death when carrying firearms. The issue addressed in this survey is the access to firearms by Montana youth.

Highlights of the survey related to unintentional injuries and violence

- In 2007, 13 percent of all Montana 7th and 8th grade students reported "Never or Rarely" wearing seat belts when riding in a car driven by someone else. This is a slightly higher rate than in 2005. Approximately 34 percent of Montana 7th and 8th grade students wear seat belts all the time (Figure 1 and Figure 2, Appendix B).
- Approximately 44 percent of the respondents have ridden in a car driven by someone who had been drinking (Figure 1, Appendix B).
- During their lifetime, 20 percent of the survey participants had seriously considered attempting suicide and 68 percent of those considering suicide had actually made a plan to attempt suicide. Eight percent of the students taking the survey reported that they had actually attempted suicide (Figure 1, Appendix B).
- During their lifetime, 57 percent of survey respondents reported being in a physical fight (Figure 1, Appendix B).
- In 2007, 31 percent of male and 38 percent of female Montana 7th and 8th grade students reported "Always" wearing seat belts (Figure 2, Appendix B).
- Forty-four percent of the Montana 7th and 8th grade students reported that, in their lifetime, they had ridden in a car driven by someone who had been drinking (Figure 1, Appendix B).
- Male Montana 7th and 8th grade students were more likely to have been involved in a physical fight than females (Figure 1, Appendix B).
- In the past year, 7 percent of Montana 7th and 8th grade students reported having been injured in a physical fight (Appendix A).
- Female Montana 7th and 8th grade students were more likely to consider and attempt suicide than males (Figure 1, Appendix B).

TOBACCO USE

Overview

Tobacco use, including cigarette smoking, cigar smoking, and smokeless tobacco use, is the single leading preventable cause of death in the United States. Each year smoking causes approximately 435,000 premature deaths and over 5 million years of potential life lost. Every day approximately 4,000 American youth aged 12-17 try their first cigarette.⁴

- Cigarette smoking causes heart disease, stroke, chronic lung disease, and cancers of the lung, mouth, pharynx, esophagus and bladder.⁴
- Use of smokeless tobacco causes cancers of the mouth, pharynx and esophagus, gum recession, and an increased risk for health disease and stroke.⁴
- Smoking cigars increases the risk of oral, laryngeal, esophageal and lung cancers.⁴

The younger people begin smoking cigarettes, the more likely they are to become strongly addicted to nicotine. Young people who try to quit suffer the same nicotine withdrawal symptoms as adults who try to quit.

- In Montana, 19 percent of all adults currently smoke cigarettes.³
- Approximately one out of every five deaths in Montana can be attributed to tobacco use.³
- On an average day, nearly four Montanans die prematurely from smoking related diseases. That's more than 1,400 deaths annually.³
- The estimated annual cost of direct medical expenses related to smoking in Montana in 2006 was \$277 million.⁴
- Eighty percent of people who use tobacco start smoking or using smokeless tobacco before age 18, thus making nicotine addiction a disease that begins in childhood.⁴

Eight questions were asked of Montana 7th and 8th grade students regarding the use of tobacco (Appendix A). The questions related to frequency and use of both cigarettes and smokeless tobacco.

Highlights of the survey related to tobacco use

- Slightly over one-fourth (27 percent) of Montana 7th and 8th grade students have tried smoking. Ten percent smoked cigarettes on one or more days in the month prior to taking the survey (Figure 3, Appendix B).
- Four percent of Montana 7th and 8th grade students reported that they smoked two or more cigarettes on the days they smoked (Figure 3, Appendix B).
- In 2007, 6 percent of Montana 7th and 8th grade students reported using chewing tobacco. This figure was slightly less than in 2005 (Figure 3, Appendix B).
- Ten percent of Montana 7th and 8th grade students reported that they are current smokers, i.e., that they have smoked in the past 30 days. The rate in 2007 was slightly lower than in 2005 (Figure 3, Appendix B).

ALCOHOL AND OTHER DRUG USE

Overview

Excessive alcohol consumption contributes to cirrhosis of the liver, motor vehicle and other accidents, suicides, homicides, and some types of cancer. Traffic accidents involving drinking historically have been and continue to be a major problem in Montana. Alcohol related crashes tend to result in more severe injuries than do crashes with no alcohol involvement.

- Alcohol-related motor vehicle crashes kill someone in the United States every 31 minutes and non-fatally injure someone every two minutes.⁵
- Montana has the highest alcohol-related fatality rate in the nation.⁵
- In 2006, Montana reported 22,186 motor vehicle crashes; 226 were fatal crashes resulting in 263 fatalities. Of these fatalities, 126 (or 48 percent) were alcohol-related deaths; 108 (or 41 percent) involved blood alcohol concentrations (BAC) of 0.08 or higher.⁵
- In 2006, 16 percent of adult Montanans reported binge drinking (males having five or more drinks on one occasion, females having four or more drinks on one occasion in the past 30 days).⁶ In comparison, 33 percent of Montana high school students have reported binge drinking in the past 30 days.

Nine questions were asked of Montana 7th and 8th grade students regarding their use of alcohol and drugs (Appendix A). The questions related to frequency of use, age of first use, and types and forms of drugs used.

Highlights of the survey related to alcohol and other drug use

- Forty-five percent of Montana 7th and 8th grade students had at least one drink of alcohol during their lifetimes (Appendix A).
- Fifteen percent of Montana 7th and 8th grade students had used marijuana in their lifetimes (Figure 4, Appendix B).
- Three percent of Montana 7th and 8th grade students reported using methamphetamines in their lifetime (Appendix A).
- Six percent of Montana 7th and 8th grade students reported using cocaine at least once during their lifetime (Figure 4, Appendix B).
- Thirteen percent of the Montana 7th and 8th grade students reported that they had five or more drinks in a row at least once during the past 30 days (Figure 4, Appendix B).

SEXUAL BEHAVIORS

Overview

Despite improvements, the United States still has some of the highest rates of teenage pregnancy and childbearing in the industrialized world. Each year, almost 750,000 teenage women aged 15–19 become pregnant with 82 percent of these pregnancies being unintended. Teens in the United States also have higher rates of sexually transmitted infections (STIs) than do teens in other industrialized countries.⁷

- Nationally, 46.8 percent of high school students have had sexual intercourse during their life; a *decline* in sexual activity from 1991 when 54 percent of high school students had had sexual intercourse. Montana trends for sexual activity have also declined from a high of 51 percent of high school students having had sexual intercourse in 1991 to 45.7 percent in 2007.
- In addition, the teen birthrate has declined steadily since 1991. Nationally, the 2004 rate of 41.1 births per 1,000 females aged 15-19 is a record low and is 33 percent lower than the 1991 rate of 61.8. Montana teen birth rates have decreased from 46.8 births per 1,000 females aged 15-19 in 1991 to 35.8 births per 1,000 females in 2004.⁸

Four questions were asked of Montana students regarding their sexual behaviors (Appendix A). Questions were related to age, numbers of partners, abstinence and contraception.

Highlights of the survey related to sexual behaviors that contribute to unintended pregnancies and STDs

- Eighty-four percent of Montana 7th and 8th grade students reported not having had sexual intercourse. This represents an increase over the rates in 2005 and 2003 (Figure 5, Appendix B).
- Seventy-one percent of Montana 7th and 8th grade students have had HIV/AIDS education (Figure 5, Appendix B).
- Four percent of Montana 7th and 8th grade students have had sexual intercourse with four or more people during their life (Figure 5, Appendix B).
- Sixty-nine percent of those Montana 7th and 8th grade students who have had sex reported wearing a condom during their last sexual intercourse. (Figure 5, Appendix B).
- Montana 7th and 8th grade male students were more likely to have had sexual intercourse than female students (Figure 6, Appendix B).

- Fifty-one percent of Montana 7th and 8th grade students who have had sexual intercourse reported having had sex with multiple (two or more) partners (Figure 7, Appendix B).
- Thirty percent of Montana 7th and 8th grade students who have had sexual intercourse reported not using a condom the last time they had sex (Figure 7, Appendix B).

PHYSICAL INACTIVITY

Overview

Regular physical activity helps build and maintain healthy bones and muscles; helps reduce the risk of developing obesity and chronic diseases such as diabetes and cardiovascular disease; and reduces feelings of depression and anxiety and promotes psychological well-being.⁹ Inadequate physical activity behaviors established during youth may extend into adulthood and increase risk for coronary heart disease, hypertension, non-insulin dependent diabetes, osteoporosis, obesity, and mental health problems.

- 2005 YRBS results show that 69 percent of Montana high school youth did not meet currently recommended levels of physical activity.
- In addition, 42 percent of Montana high school youth did not attend physical education class.
- One in five, or 19.4 percent, of adult Montanans report not participating in any physical activities during the past month.⁶

Seven questions were asked of Montana students regarding their body weight and physical activity (Appendix A). The questions related to types of physical activity as well as frequency of activity.

Highlights of the survey related to physical inactivity

- Seventy-eight percent of Montana 7th and 8th grade students played on one or more sports teams during the past 12 months. Twenty-seven percent of Montana 7th and 8th grade students attended physical education classes daily (Figure 8, Appendix B).
- Over one-half (51 percent) of Montana 7th and 8th grade students reported watching TV two or more hours per day (Figure 8, Appendix B).
- Seventy-eight percent of Montana 7th and 8th grade students were physically active for a total of at least 60 minutes on three or more of the seven days prior to taking the survey (Figure 8, Appendix B).

DIETARY BEHAVIORS

Overview

The prevalence of overweight among United States children aged 6 to 11 more than doubled in the past 20 years, going from 7 percent in 1980 to 18.8 percent in 2004. The rate among adolescents aged 12 to 19 more than tripled, increasing from 5 percent to 17.1 percent. Overweight is the result of caloric imbalance (too few calories expended for the amount of calories consumed) and is mediated by genetics and health. Overweight young people are more likely than children of normal weight to become overweight or obese adults, and therefore more at risk for associated adult health problems, including heart disease, type 2 diabetes, stroke, several types of cancer, and osteoarthritis. One-third of the 559,650 cancer deaths expected to occur in 2007 will be related to overweight or obesity, physical inactivity, and nutrition and thus could be prevented.⁹

- Body Mass Index (BMI) for adult Montanans indicates that 38.1 percent of adult Montanans are overweight (BMI between 25.0 and 29.9) and 21.2 percent are obese (BMI of 30 or more).⁶
- Twenty percent (40,395) of Montana youth live in poverty and thus are at risk for hunger. Montana ranks high (36 out of the 50 states) for the percent of children living in poverty.⁶

Seven questions were asked of Montana students regarding dietary excesses and imbalances (Appendix A). The questions related to weight gain and loss among the youth.

Highlights of the survey related to dietary behaviors

- Over one-half (57 percent) of Montana 7th and 8th grade students think they are "about the right weight." More boys tend to think they are at about the right weight than girls (Appendix A).
- Forty-three Montana 7th and 8th grade students are trying to lose weight (Appendix A).

Resources

- ¹ 2007 Kids Count Data Book.
- ² Montana Department of Public Health and Human Services, Vital Statistics, 2005.
- ³ Centers for Disease Control and Prevention, *Sustaining State Programs for Tobacco Control: Data Highlights 2006*.
- ⁴ Campaign for Tobacco-Free Kids, 2007.
- ⁵ United States Department of Transportation, National Highway Traffic Safety Administration, 2006.
- ⁶ CDC, National Center for Disease Prevention and Health Promotion, Behavioral Risk Factor Surveillance System, 2006.
- ⁷ Child Trends, 2006.
- ⁸ CDC, National Center for Health Statistics, National Vital Statistics Reports, 2006.
- ⁹ CDC, National Center for Disease Prevention and Health Promotion, Healthy Youth, 2006.
- ¹⁰ American Cancer Society, Cancer Facts and Figures, 2007.

Conclusions



IV. CONCLUSIONS AND RECOMMENDATIONS

Results of the 2007 Montana Youth Risk Behavior Survey for 7th and 8th grade students indicate that although progress has been made over the past several years in decreasing risk from undesirable behaviors, Montana health, education, and social professionals need to continue to focus on those primary risk behaviors that cause the greatest amount of mortality, morbidity, and social problems among Montana youth. These primary risk behaviors are initiated during adolescence, yet the consequences of unhealthy behaviors are exhibited from adolescence through adulthood. For example, youth may start smoking in their early teens, but complications such as emphysema do not appear until adulthood.

Important risk behaviors where improvement will be needed in order for Montana to meet current health objectives are:

- **Seat belt usage** – only 34 percent of Montana 7th and 8th grade students reported wearing seat belts *all* of the time when riding in a car driven by someone else. This level of usage is a slight decrease from the 2005 level, and is far short of the current Healthy People 2010 objective for seat belt use of 92 percent of all occupants wearing seat belts *all* of the time.
- **Suicide attempts** – 20 percent of Montana 7th and 8th grade students have seriously thought about killing themselves. Fourteen percent had made a plan for suicide and 8 percent reported actually attempting suicide. Montana's teen suicide rate ranks third highest in the nation. The current Healthy People 2010 objective is to reduce the incidence of suicide attempts to one percent for adolescents aged 14-17.
- **Smokeless tobacco use** – Montana 7th and 8th grade students are continuing to use smokeless tobacco products at rates that are higher than national trends. In 2007, 6 percent of Montana 7th and 8th grade students used snuff or chewing tobacco in the 30 days prior to the survey. The current Healthy People 2010 objective is to reduce usage to less than one percent by 2010.
- **Alcohol usage** – the 2007 YRBS indicates that approximately 45 percent of Montana 7th and 8th grade students had used alcohol in their lifetimes. The current Healthy People 2010 objective is to reduce alcohol intake to 11 percent of youth aged 12-17 and to 29 percent of youth aged 18-20.
- **Marijuana usage** – the 2007 YRBS indicates that 15 percent of Montana 7th and 8th grade students had used marijuana in their lifetimes. The current Healthy People 2010 objective is to reduce the use of marijuana in the past month to less than 1 percent for the age group that includes Montana 7th and 8th grade students.

There is still much to do to achieve the national health objectives for the reported health-risk behaviors of Montana 7th and 8th grade students. Although reported behaviors related to the risk behaviors of driving while drinking, riding with a drinking driver, suicide attempts, fighting, smoking, alcohol and other drug use, sexual behaviors, and physical activity have shown some improvement since 1999, a long-term, comprehensive approach to improving health and reducing risks is needed to provide Montana 7th and 8th grade students with healthier lives further removed from the illness, death and social problems linked to preventable health risks.

There are several areas where Montana appears to be meeting or exceeding national objectives:

- The 2007 YRBS indicates that 95 percent of Montana 7th and 8th grade students had abstained from sexual intercourse or used condoms the last time they had sexual intercourse. This indicates that Montana 7th and 8th grade students have matched the current Healthy People 2010 objective of having responsible adolescent sexual behavior at 95 percent of youth.
- Montana schools continue to provide HIV/AIDS education to its young people. About 79 percent of Montana 7th and 8th grade students indicated they have received education related to AIDS/HIV infection.
- About 78 percent of Montana 7th and 8th grade students regularly perform physical activities for 60 minutes or more at least three days per week. The current national objective is to maintain the rate at 40 percent.

In order for Montana to help develop youth who will become healthy, responsible adults and to meet the current health objectives, the following recommendations are set forth:

1. Ensure that comprehensive health education and programs are implemented at adequate levels to continue to educate Montana 7th and 8th grade students. Comprehensive school health programs and policies that support what is taught in the Health Enhancement classroom encourage long-term healthy lifestyles. Going beyond the classroom (e.g., drug-free and tobacco-free schools) involves the community and other agencies in the health of its young people. There is no greater tool for changing behavior patterns than effective, skills-based, age-appropriate health education. If Montana 7th and 8th grade students are to change risk behaviors, they will need to have full understanding of the positive aspects of healthy behaviors, as well as the negative consequences of unhealthy behaviors.

Other comprehensive recommendations include:

- Communities should be encouraged to provide for developmentally appropriate preschool programs that help prepare children for school, thereby improving the prospects with regard to school performance, problem behaviors and physical health.
 - Montana students should have daily access to and participation in health enhancement classes.
 - Montana schools should be encouraged to provide programs for parents such as parenting skills and encourage parents to talk to their children regarding health issues.
 - Montana schools should consider programs that provide students who are in need of social and health services either the services or proper referrals to services (i.e., "full-service schools" or "school-linked services").
 - Montana schools should have policies and programs in place that encourage school completion for all students and reduce the incidence of school dropouts.
 - Montana schools should provide for all students guidance counselors who are properly prepared to deal with student issues.
2. Comprehensive health education and life management skills should be taught in all schools at appropriate age and developmental levels.
 3. The effectiveness of comprehensive health education programs needs to be evaluated and, if necessary, modified in order to meet current health education objectives.
 4. Improve the behavior patterns of Montana 7th and 8th grade students in the following areas:
 - increasing seat belt and helmet use,
 - reducing alcohol use,
 - reducing marijuana use,
 - reducing use of tobacco products, especially smokeless tobacco, by young males and females, and

- increasing the number of youth who abstain from sexual intercourse, delaying the age of first sexual intercourse, increasing the number of sexually active youth who choose to reestablish abstinence from sexual intercourse, recognizing that there are youth who are sexually active, and increasing the use of condoms among sexually active youth.
5. Continue to address significant health-risk behaviors through prevention efforts that include the following concepts:
- Unintentional Injuries and Violence

Montana students should have access to and participate in accident prevention education, suicide prevention education and violence prevention education programs such as peer mediation and/or conflict resolution.

Montana schools should provide policies for staff and students that encourage safe, disciplined and drug-free environments.
 - Tobacco Use

Montana students should have access to and participate in tobacco education and prevention programs, including smokeless tobacco, at all grade levels.

Montana schools should be tobacco-free.
 - Alcohol and Other Drug Use

Montana students should have access to and participate in alcohol education and prevention programs at all grade levels.

Montana students should have access to and participate in bicycle/pedestrian safety and driver education programs at appropriate levels.
 - Sexuality

Montana students should have access to and participate in age-appropriate human sexuality education as part of a comprehensive school health program or as part of a family or faith-based structured program in line with family and community values.
 - Physical Inactivity

Montana students should engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness three or more days per week for 20 or more minutes per occasion.

- Nutrition

Montana students should have access to lunch and breakfast services in the home or at school that are consistent with the nutritional principles in the "Dietary Guidelines for Americans."

Nutrition education should be part of a comprehensive school health program at all grades. Ongoing education on safe weight management practices and acceptance of body size differences in Montana 7th and 8th grade students should be a part of nutrition education.

6. Continue collaborative efforts involving state and local agencies (both public and private) to ensure that health behavior risks of Montana 7th and 8th grade students are addressed in a coordinated manner. Meeting the health and safety needs of adolescents requires coordinated efforts involving schools, communities, health services and parents.
7. Continue the support of comprehensive health education and programs by school boards, school administrators, teachers, health service agencies, legislators, and parents.
8. Continue to monitor Montana 7th and 8th grade students' behavior patterns using the Youth Risk Behavior Survey (YRBS) instrument developed through the U.S. Public Health Service, Centers for Disease Control and Prevention.

APPENDIX A
FREQUENCY DISTRIBUTIONS

2007 MONTANA YOUTH RISK BEHAVIOR SURVEY

7th AND 8th GRADE FREQUENCY DISTRIBUTIONS

The following frequency distributions are based upon surveys of 7,977 7th and 8th grade students in Montana during February of 2007. Frequency distributions may not total 7,977 due to non-response and percents may not total 100 percent due to rounding.

Q-1 How old are you?

	<u>Percent</u>
A. 10 years old or younger	0.2%
B. 11 years old	0.2%
C. 12 years old	15.4%
D. 13 years old	45.8%
E. 14 years old	35.1%
F. 15 years old	3.1%
G. 16 years old or older	0.3%

Q-2 What is your sex?

	<u>Percent</u>
A. Female	48.8%
B. Male	51.2%

Q-3 In what grade are you?

	<u>Percent</u>
A. 6th Grade	0.3%
B. 7th Grade	46.9%
C. 8th Grade	52.5%
D. Other	0.4%

Q-4 Are you Hispanic or Latino?

	<u>Percent</u>
A. Yes	7.4%
B. No	92.6%

Q-5 What is your race?

	<u>Percent</u>
A. American Indian or Alaska Native	17.2%
B. Asian	2.1%
C. Black or African American	2.1%
D. Native Hawaiian or Other Pacific Islander	1.5%
E. White	80.2%

The next 4 questions ask about safety.

Q-6 When you ride a bicycle, how often do you wear a helmet?

	<u>Percent</u>
A. I do not ride a bicycle	0.0%
B. Never wear a helmet	0.0%
C. Rarely wear a helmet	0.0%
D. Sometimes wear a helmet	0.0%
E. Most of the time wear a helmet	0.0%
F. Always wear a helmet	0.0%

Q-7 When you rollerblade or ride a skateboard, how often do you wear a helmet?

	<u>Percent</u>
A. I do not rollerblade or ride a skateboard	0.0%
B. Never wear a helmet	0.0%
C. Rarely wear a helmet	0.0%
D. Sometimes wear a helmet	0.0%
E. Most of the time wear a helmet	0.0%
F. Always wear a helmet	0.0%

Q-8 How often do you wear a seat belt when riding in a car?

	<u>Percent</u>
A. Never	3.6%
B. Rarely	9.5%
C. Sometimes	18.0%
D. Most of the time	34.7%
E. Always	34.2%

Q-9 Have you ever ridden in a car driven by someone who had been drinking alcohol?

	<u>Percent</u>
A. Yes	43.6%
B. No	38.6%
C. Not sure	17.7%

The next 3 questions ask about violence-related behaviors.

Q-10 Have you ever carried a weapon, such as a gun, knife, or club?

	<u>Percent</u>
A. Yes	48.0%
B. No	52.0%

Q-11 Have you ever been in a physical fight?

	<u>Percent</u>
A. Yes	57.0%
B. No	43.0%

Q-12 Have you ever been in a physical fight in which you were hurt and had to be treated by a doctor or nurse?

	<u>Percent</u>
A. Yes	7.4%
B. No	92.6%

The next 3 questions ask about attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide or killing themselves.

Q-13 Have you ever seriously thought about killing yourself?

	<u>Percent</u>
A. Yes	20.4%
B. No	79.6%

Q-14 Have you ever made a plan about how you would kill yourself?

	<u>Percent</u>
A. Yes	13.9%
B. No	86.1%

Q-15 Have you ever tried to kill yourself?

	<u>Percent</u>
A. Yes	7.5%
B. No	92.5%

The next 8 questions ask about tobacco use.

Q-16 Have you ever tried cigarette smoking, even one or two puffs?

	<u>Percent</u>
A. Yes	27.1%
B. No	72.9%

Q-17 How old were you when you smoked a whole cigarette for the first time?

	<u>Percent</u>
A. I have never smoked a whole cigarette	81.2%
B. 8 years old or younger	5.1%
C. 9 years old	1.5%
D. 10 years old	2.1%
E. 11 years old	2.7%
F. 12 years old	3.6%
G. 13 years old or older	3.9%

Q-18 During the past 30 days, on how many days did you smoke cigarettes?

	<u>Percent</u>
A. 0 days	90.4%
B. 1 or 2 days	4.2%
C. 3 to 5 days	1.2%
D. 6 to 9 days	0.9%
E. 10 to 19 days	1.2%
F. 20 to 29 days	0.6%
G. All 30 days	1.6%

Q-19 During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?

	<u>Percent</u>
A. I did not smoke cigarettes during the past 30 days	91.2%
B. Less than 1 cigarette per day	2.8%
C. 1 cigarette per day	2.0%
D. 2 to 5 cigarettes per day	2.4%
E. 6 to 10 cigarettes per day	0.8%
F. 11 to 20 cigarettes per day	0.2%
G. More than 20 cigarettes per day	0.6%

Q-20 During the past 30 days, how did you usually get your own cigarettes?

	<u>Percent</u>
A. I did not smoke cigarettes during the past 30 days	90.9%
B. I bought them in a store such as a convenience store, supermarket, discount store, or gas station	0.6%
C. I bought them from a vending machine	0.2%
D. I gave someone else money to buy them for me	1.8%
E. I borrowed (or bummed) them from someone else	1.9%
F. A person 18 years old or older gave them to me	0.7%
G. I took them from a store or family member	1.4%
H. I got them some other way	2.5%

Q-21 Have you ever smoked cigarettes daily, that is, at least one cigarette every day for 30 days?

	<u>Percent</u>
A. Yes	8.5%
B. No	91.5%

Q-22 During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen?

	<u>Percent</u>
A. 0 days	93.6%
B. 1 or 2 days	2.8%
C. 3 to 5 days	0.9%
D. 6 to 9 days	0.7%
E. 10 to 19 days	0.6%
F. 20 to 29 days	0.3%
G. All 30 days	1.0%

Q-23 During the past 30 days, on how many days did you smoke cigars, cigarillos, or little cigars?

	<u>Percent</u>
A. 0 days	94.3%
B. 1 or 2 days	3.7%
C. 3 to 5 days	0.7%
D. 6 to 9 days	0.4%
E. 10 to 19 days	0.3%
F. 20 to 29 days	0.1%
G. All 30 days	0.6%

The next 3 questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes.

Q-24 Have you ever had a drink of alcohol, other than a few sips?

	<u>Percent</u>
A. Yes	44.8%
B. No	55.2%

Q-25 How old were you when you had your first drink of alcohol other than a few sips?

	<u>Percent</u>
A. I have never had a drink of alcohol other than a few	56.3%
B. 8 years old or younger	8.8%
C. 9 years old	2.9%
D. 10 years old	5.2%
E. 11 years old	5.7%
F. 12 years old	9.8%
G. 13 years old or older	11.2%

Q-26 During the past 30 days, on how many days did you binge drink, that is, have 5 or more drinks of alcohol in a row within a couple of hours?

	<u>Percent</u>
A. 0 days	86.9%
B. 1 day	6.4%
C. 2 days	2.3%
D. 3 to 5 days	1.9%
E. 6 to 9 days	0.9%
F. 10 to 19 days	0.5%
G. 20 or more days	1.0%

The next 2 questions ask about marijuana use. Marijuana also is called grass or pot.

Q-27 Have you ever used marijuana?

	<u>Percent</u>
A. Yes	15.3%
B. No	84.7%

Q-28 How old were you when you tried marijuana for the first time?

	<u>Percent</u>
A. I have never tried marijuana	86.1%
B. 8 years old or younger	2.3%
C. 9 years old	1.0%
D. 10 years old	1.4%
E. 11 years old	2.0%
F. 12 years old	3.2%
G. 13 years old or older	4.1%

The next 4 questions ask about other drugs.

Q-29 During your life, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?

	<u>Percent</u>
A. 0 times	82.8%
B. 1 or 2 times	9.1%
C. 3 to 9 times	3.8%
D. 10 to 19 times	1.5%
E. 20 to 39 times	1.0%
F. 40 or more times	1.9%

Q-30 During your life, how many times have you used methamphetamines (also called speed, crystal, crank, or ice)?

	<u>Percent</u>
A. 0 times	97.0%
B. 1 or 2 times	1.8%
C. 3 to 9 times	0.3%
D. 10 to 19 times	0.2%
E. 20 to 39 times	0.1%
F. 40 or more times	0.6%

Q-31 Have you ever used any form of cocaine, including powder, crack, or freebase?

	<u>Percent</u>
A. Yes	5.9%
B. No	94.1%

Q-32 Have you ever used steroid pills or shots without a doctor's prescription?

	<u>Percent</u>
A. Yes	4.7%
B. No	95.3%

The next 4 questions ask about sexual intercourse.

Q-33 Have you ever had sexual intercourse?

	<u>Percent</u>
A. Yes	16.0%
B. No	84.0%

Q-34 How old were you when you had sexual intercourse for the first time?

	<u>Percent</u>
A. I have never had sexual intercourse	83.2%
B. 8 years old or younger	4.3%
C. 9 years old	0.7%
D. 10 years old	1.0%
E. 11 years old	1.4%
F. 12 years old	2.9%
G. 13 years old or older	6.5%

Q-35 With how many people have you ever had sexual intercourse?

	<u>Percent</u>
A. I have never had sexual intercourse	84.3%
B. 1 person	7.7%
C. 2 people	2.8%
D. 3 people	1.4%
E. 4 people	0.7%
F. 5 people	0.4%
G. 6 or more people	2.7%

Q-36 The last time you had sexual intercourse, did you or your partner use a condom?

	<u>Percent</u>
A. I have never had sexual intercourse	85.0%
B. Yes	10.4%
C. No	4.6%

The next 7 questions ask about body weight.

Q-37 How do you describe your weight?

	<u>Percent</u>
A. Very underweight	3.6%
B. Slightly underweight	14.1%
C. About the right weight	56.9%
D. Slightly overweight	22.1%
E. Very overweight	3.2%

Q-38 Which of the following are you trying to do about your weight?

	<u>Percent</u>
A. Lose weight	42.9%
B. Gain weight	10.8%
C. Stay the same weight	22.0%
D. I am not trying to do anything about my weight	24.2%

Q-39 Have you ever exercised to lose weight or to keep from gaining weight?

	<u>Percent</u>
A. Yes	69.5%
B. No	30.5%

Q-40 Have you ever eaten less food, fewer calories, or foods low in fat to lose weight or to keep from gaining weight?

	<u>Percent</u>
A. Yes	42.9%
B. No	57.1%

Q-41 Have you ever gone without eating for 24 hours or more (also called fasting) to lose weight or to keep from gaining weight?

	<u>Percent</u>
A. Yes	17.3%
B. No	82.7%

Q-42 Have you ever taken any diet pills, powders, or liquids without a doctor's advice to lose weight or to keep from gaining weight? (Do not include meal replacement products such as Slim Fast.)

	<u>Percent</u>
A. Yes	6.6%
B. No	93.4%

Q43 Have you ever vomited or taken laxatives to lose weight or to keep from gaining weight?

	<u>Percent</u>
A. Yes	6.1%
B. No	93.9%

The next 5 questions ask about physical activity.

Q-44 During the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day? (Add up all the time you spend in any kind of physical activity that increases your heart rate and makes you breathe hard some of the time.)

	<u>Percent</u>
A. 0 days	7.8%
B. 1 day	6.5%
C. 2 days	7.3%
D. 3 days	10.9%
E. 4 days	11.5%
F. 5 days	16.4%
G. 6 days	10.3%
H. 7 days	29.3%

Q-45 On an average school day, how many hours do you watch TV?

	<u>Percent</u>
A. I do not watch TV on an average school day	9.1%
B. Less than 1 hour per day	20.6%
C. 1 hour per day	19.2%
D. 2 hours per day	24.1%
E. 3 hours per day	13.8%
F. 4 hours per day	6.0%
G. 5 or more hours per day	7.2%

Q-46 On an average school day, how many hours do you play video or computer games or use a computer for something that is not school work? (Include activities such as Nintendo, Game Boy, PlayStation, Xbox, computer games, and the Internet.)

	<u>Percent</u>
A. I do not play video or computer games or use a computer for something that is not school work	16.2%
B. Less than 1 hour per day	28.0%
C. 1 hour per day	20.3%
D. 2 hours per day	15.8%
E. 3 hours per day	9.7%
F. 4 hours per day	4.0%
G. 5 or more hours per day	5.9%

Q-47 In an average week when you are in school, on how many days do you go to physical education (PE) classes?

	<u>Percent</u>
A. 0 days	10.2%
B. 1 day	3.2%
C. 2 days	17.4%
D. 3 days	37.1%
E. 4 days	5.0%
F. 5 days	27.1%

Q-48 During the past 12 months, on how many sports teams did you play? (Include any teams run by your school or community groups.)

	<u>Percent</u>
A. 0 teams	21.9%
B. 1 team	22.0%
C. 2 teams	23.1%
D. 3 or more teams	33.1%

The next 3 questions ask about other health-related topics.

Q-49 Have you ever been taught about AIDS or HIV infection in school?

	<u>Percent</u>
A. Yes	71.3%
B. No	14.4%
C. Not sure	14.3%

Q-50 Has a doctor or nurse ever told you that you have asthma?

	<u>Percent</u>
A. Yes	18.0%
B. No	75.8%
C. Not sure	6.2%

Q-51 Do you still have asthma?

	<u>Percent</u>
A. I have never had asthma	67.5%
B. Yes	12.9%
C. No	10.7%
D. Not sure	8.9%

APPENDIX B

REFERENCED FIGURES

Figure 1

Unintentional injury and violence risk behaviors of 7th and 8th grade students

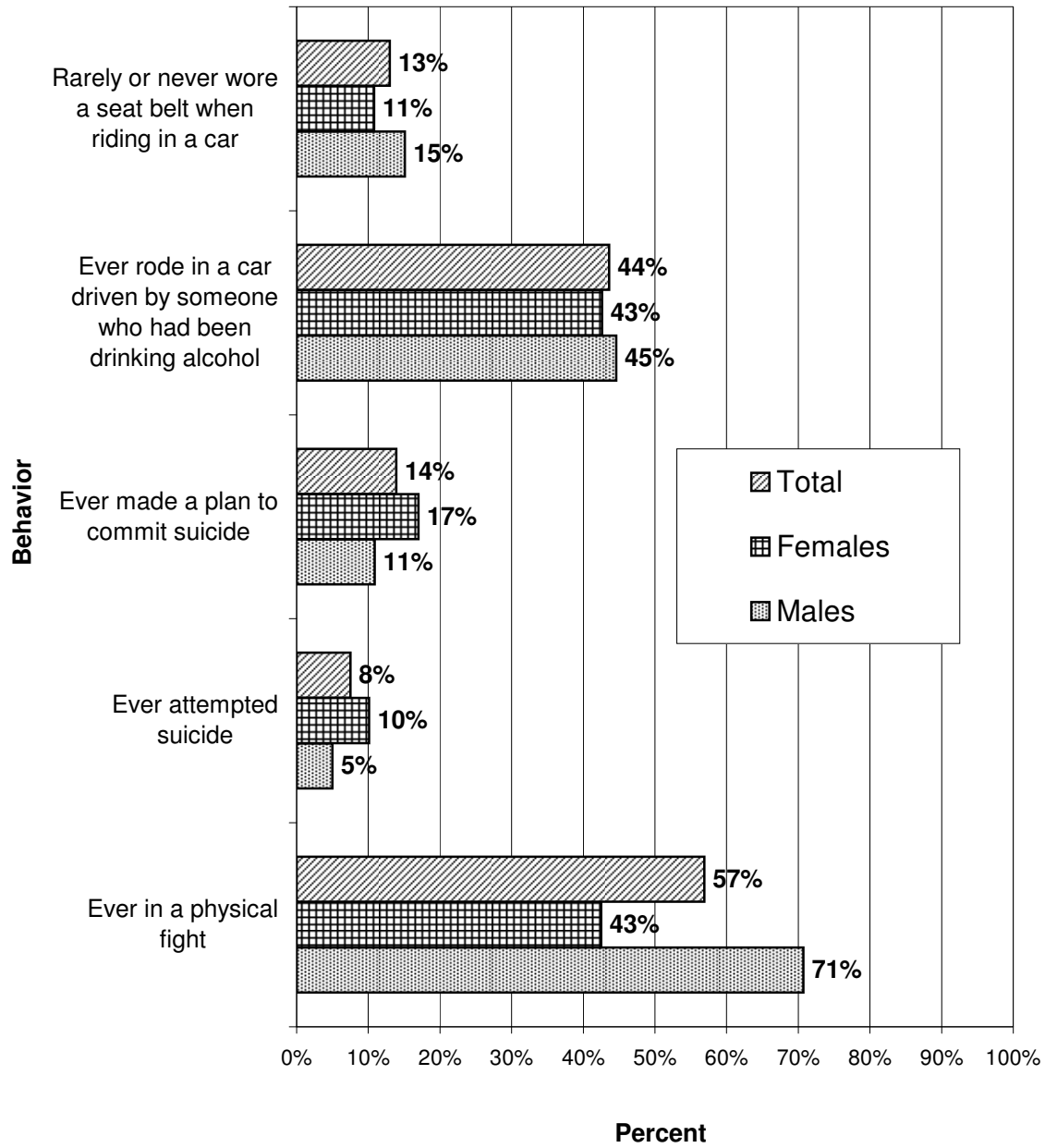


Figure 2

Percent of 7th and 8th grade students who "Always" wear a seat belt when riding in a car driven by someone else

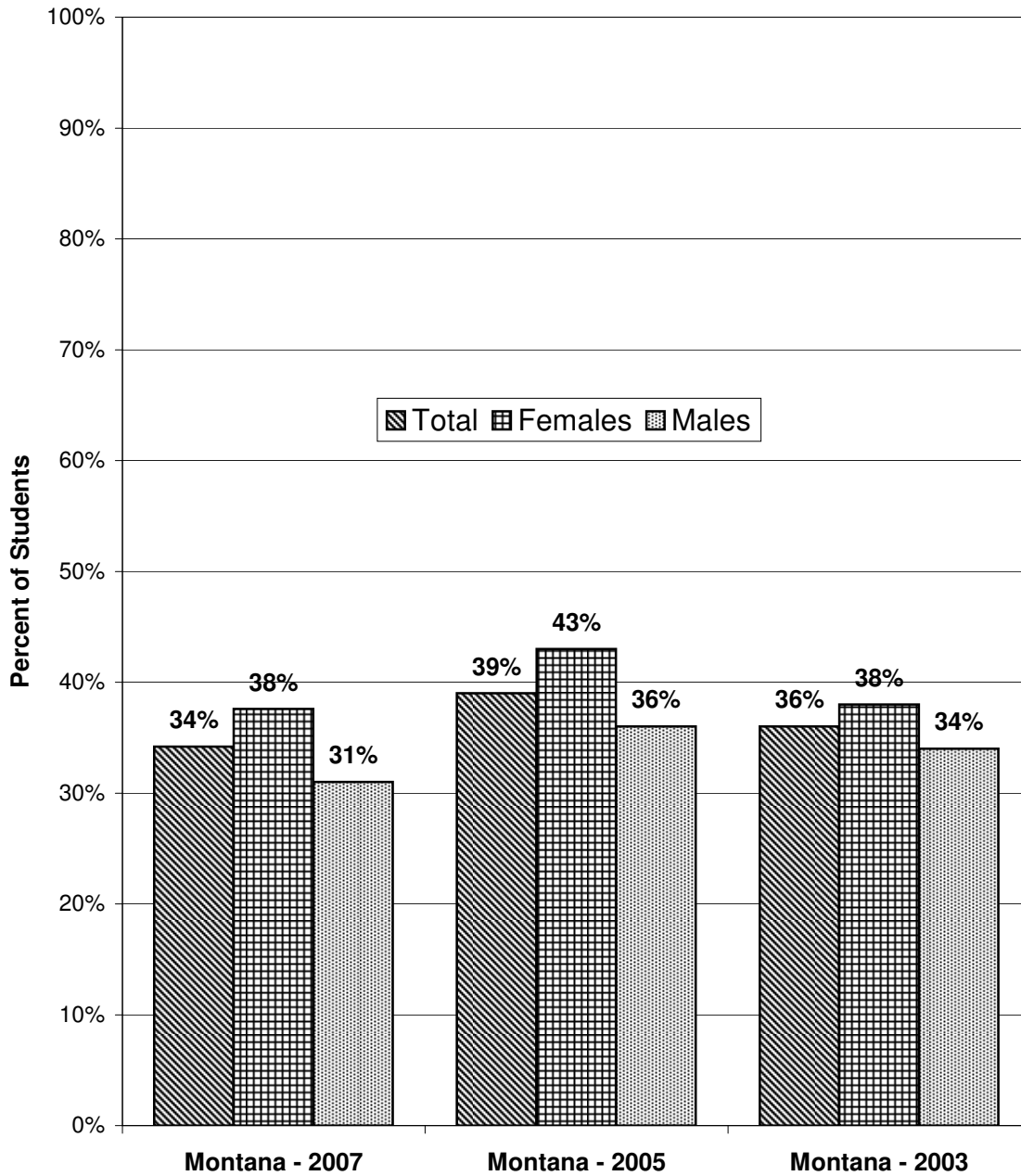


Figure 3

Tobacco use risk behaviors of 7th and 8th grade students

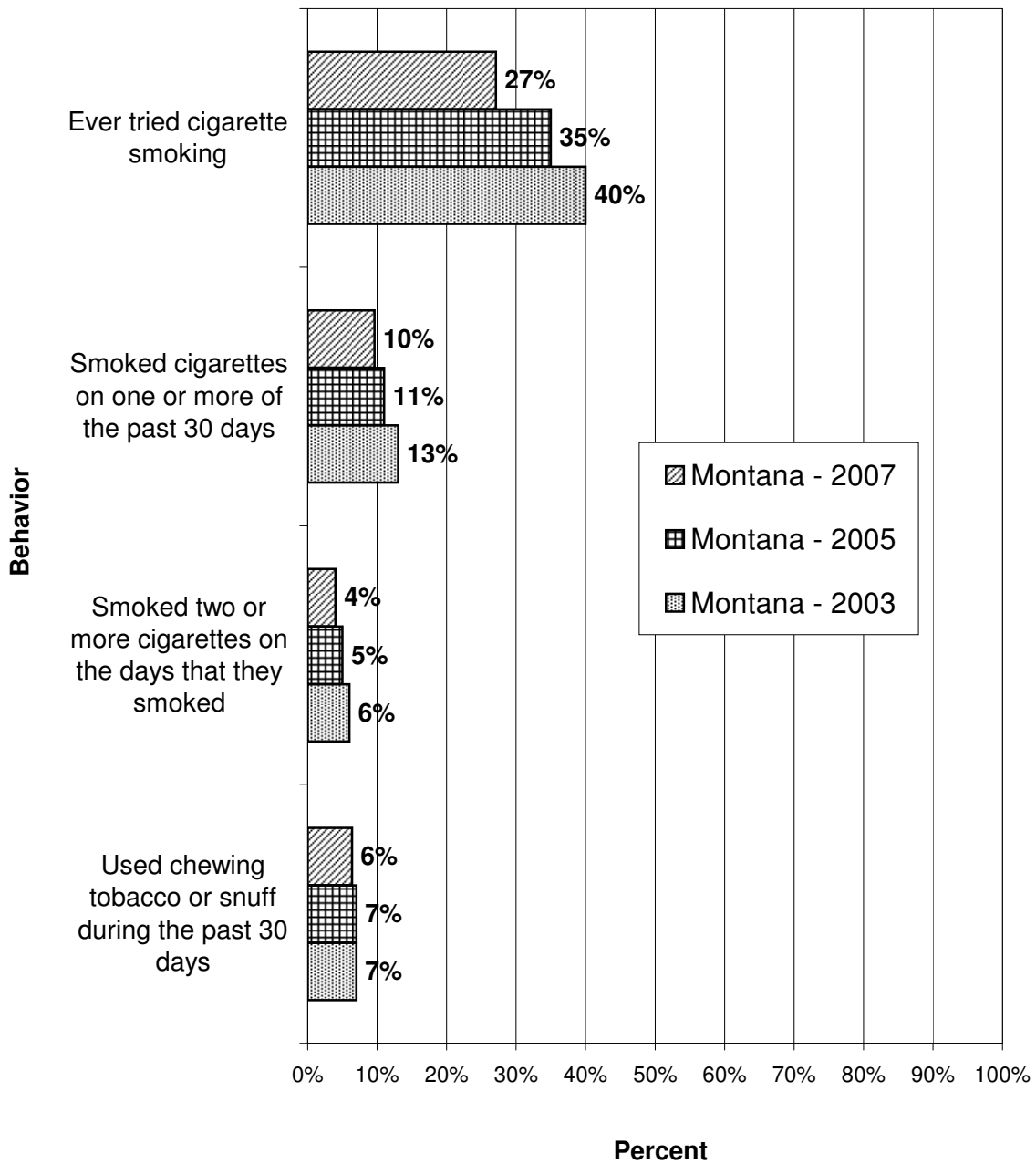


Figure 4

**Percent of 7th and 8th grade students with a potential for
alcohol and other drug use**

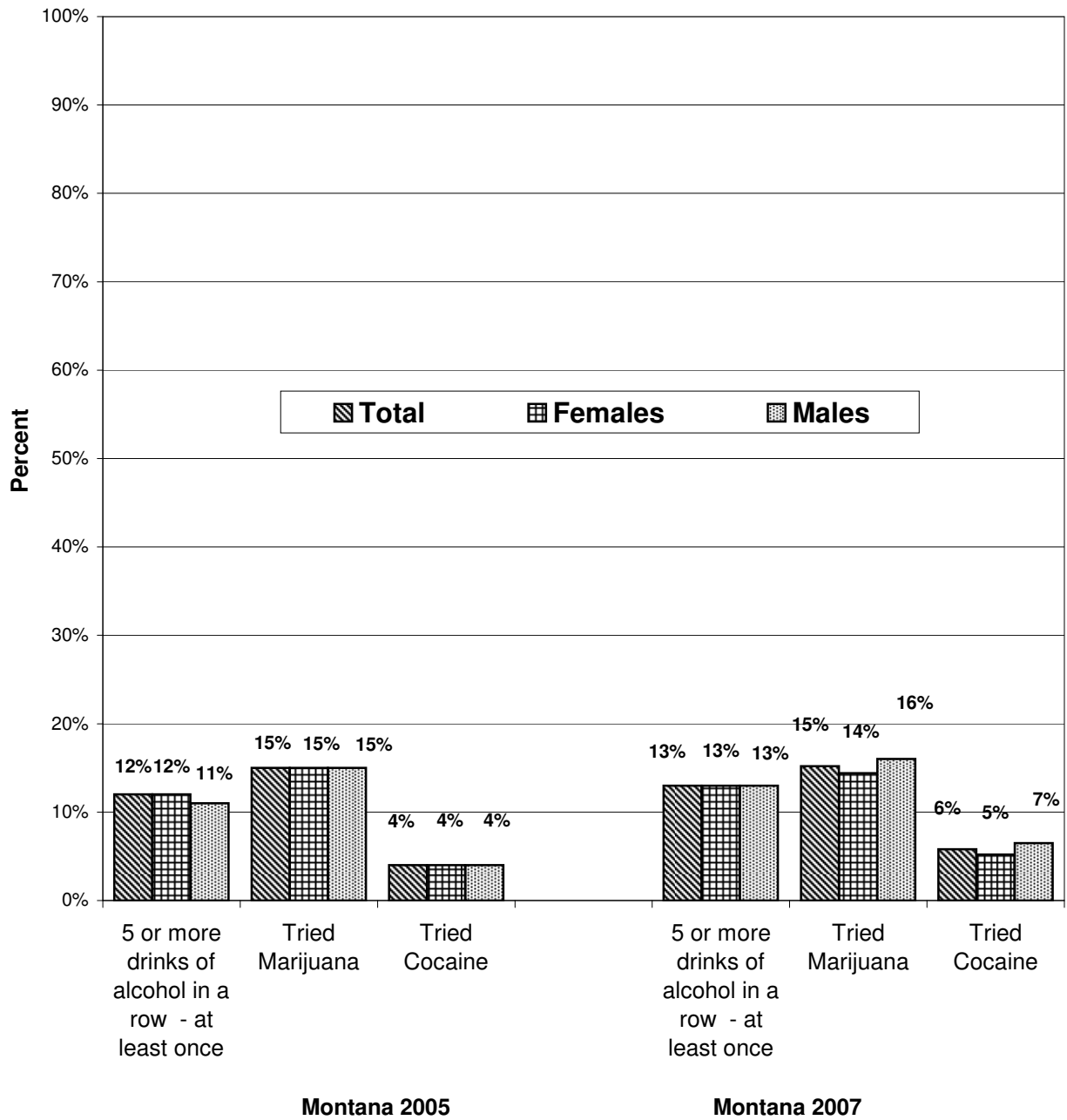


Figure 5
Sexual behaviors of 7th and 8th grade students

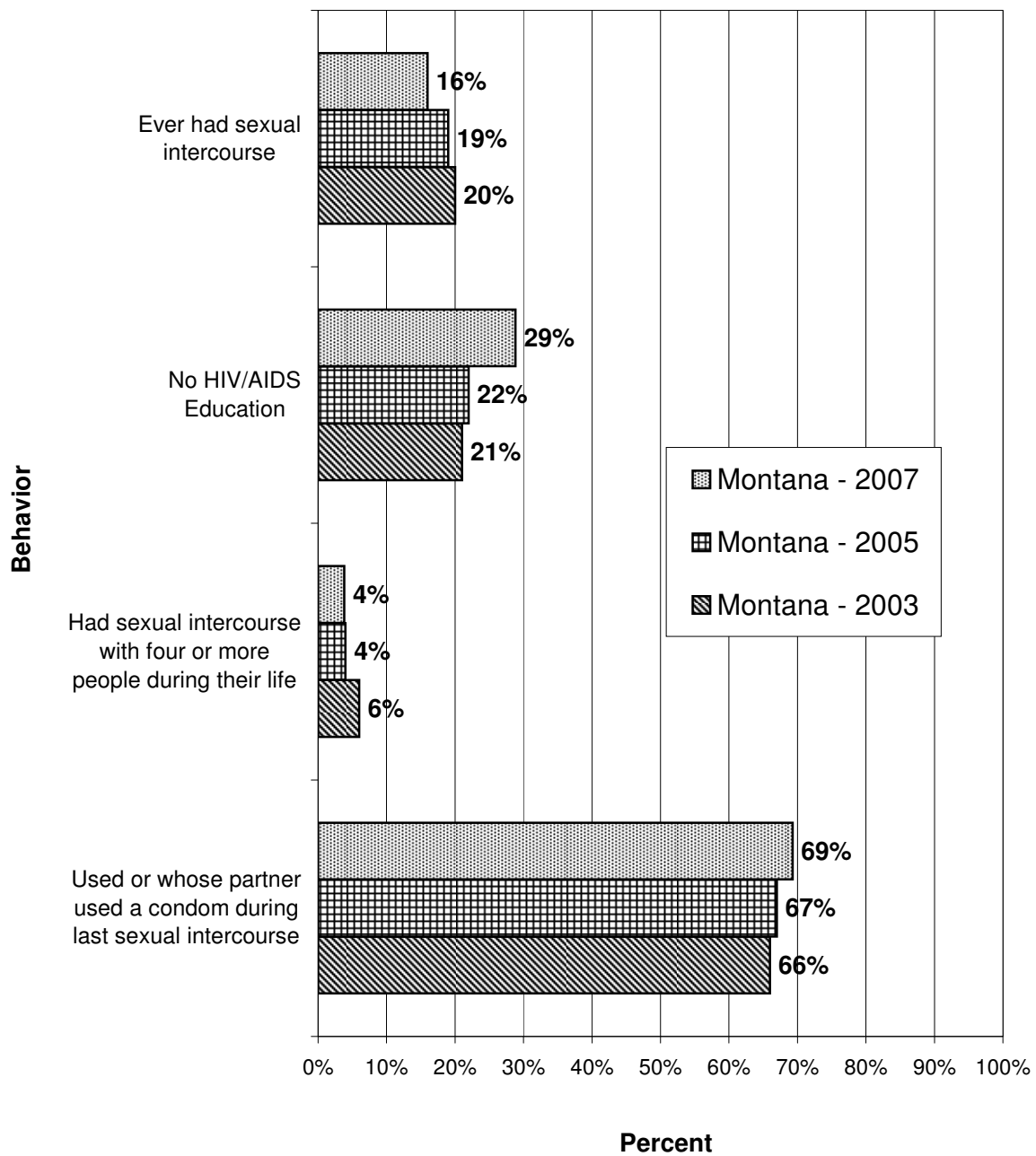


Figure 6

Percent of 7th and 8th grade students who reported ever having had sexual intercourse, by gender

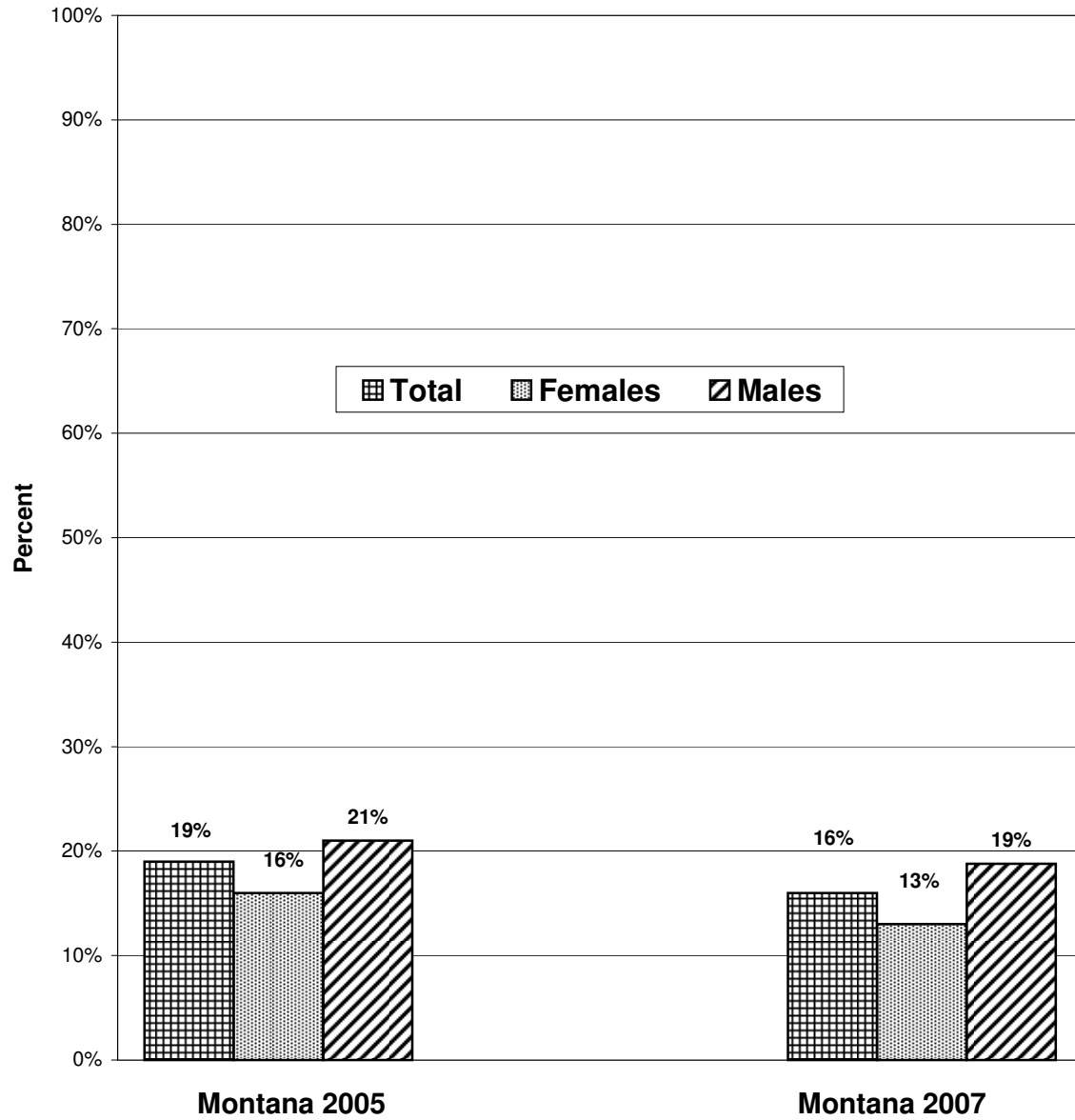


Figure 7

Percent of 7th and 8th grade students who have had sexual intercourse and reported having engaged in high-risk sexual behaviors

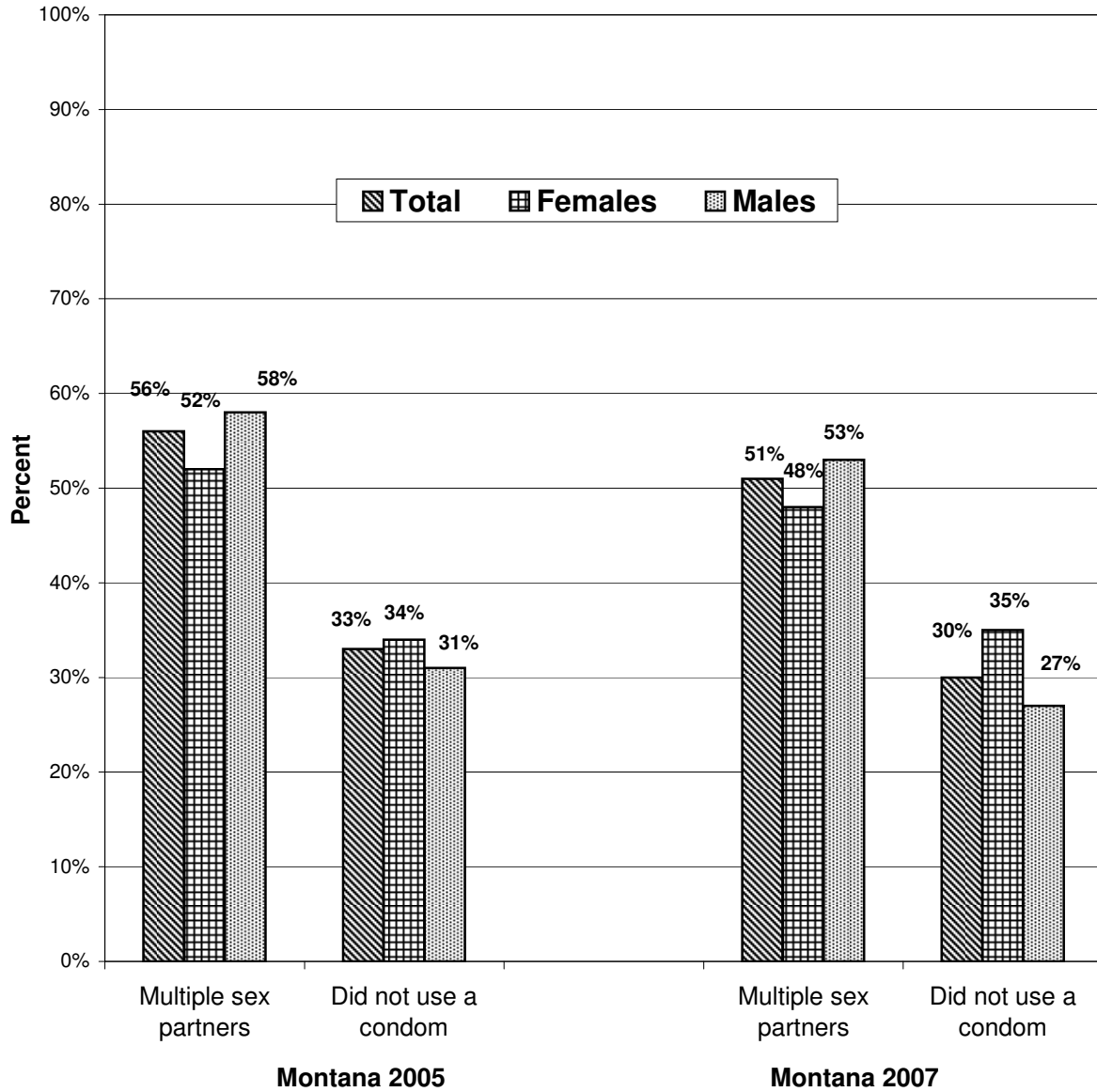
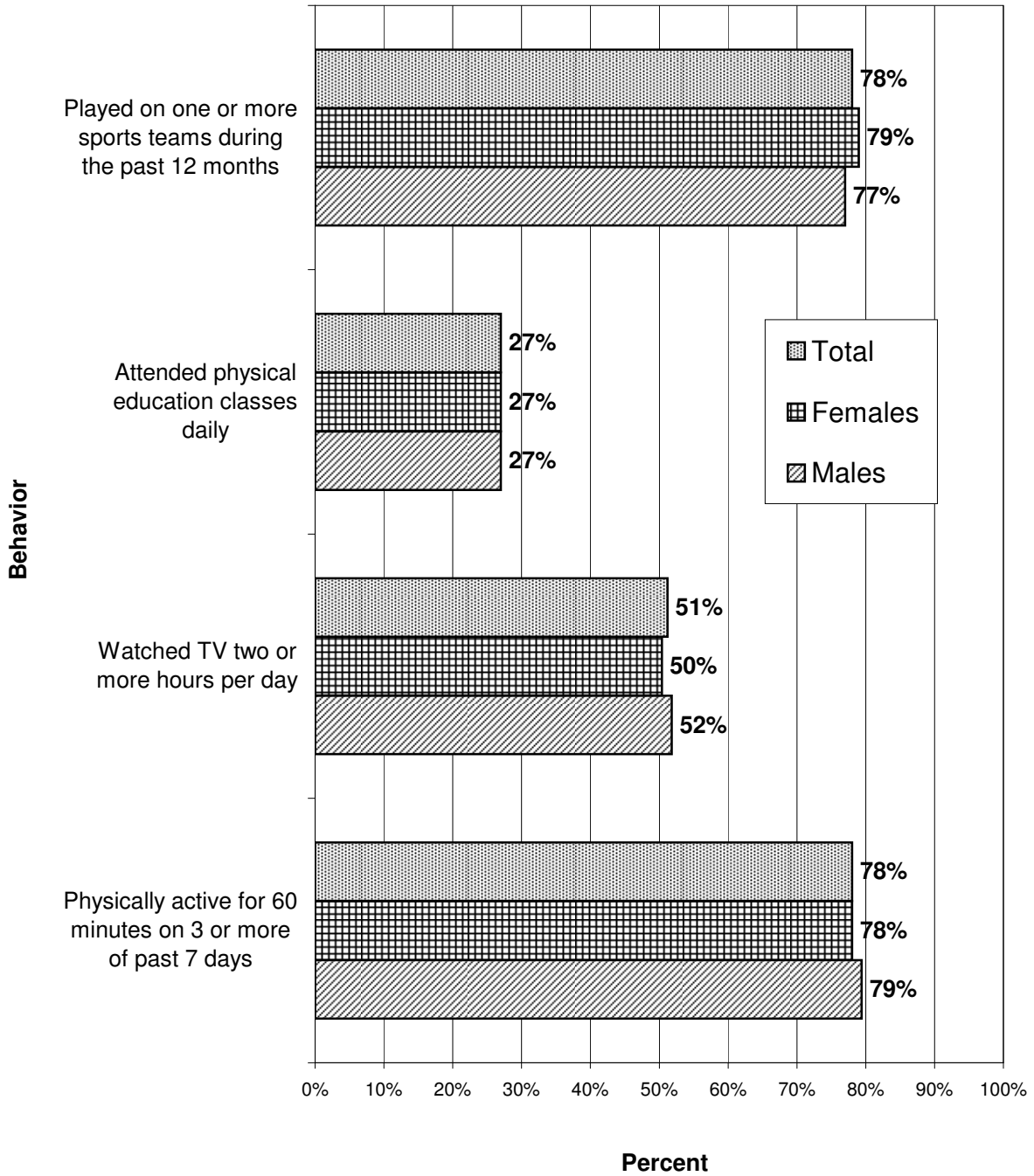


Figure 8

Physical activities of 7th and 8th grade students



APPENDIX C

ADDITIONAL CHARTS

List of Charts in Appendix C

<u>Topic</u>	<u>YRBS Question</u>	<u>Chart</u>
Demographic - age	Q-1	1
Demographic - grade	Q-3	2
Safety - seat belt usage	Q-8	3
Safety - ridding with drinking driver	Q-9	4
Tobacco use	Q-17	5
Tobacco use	Q-19	6
Tobacco use	Q-20	7
Alcohol use	Q-25	8
Marijuana use	Q-28	9
Drug use	Q-29	10
Sexual behavior	Q-34	11
Sexual behavior	Q-36	12
Weight	Q-37	13
Physical activity	Q-39	14
Physical activity	Q-48	15
HIV/AIDS Education	Q-49	16

Chart 1
Q-1 How old are you?

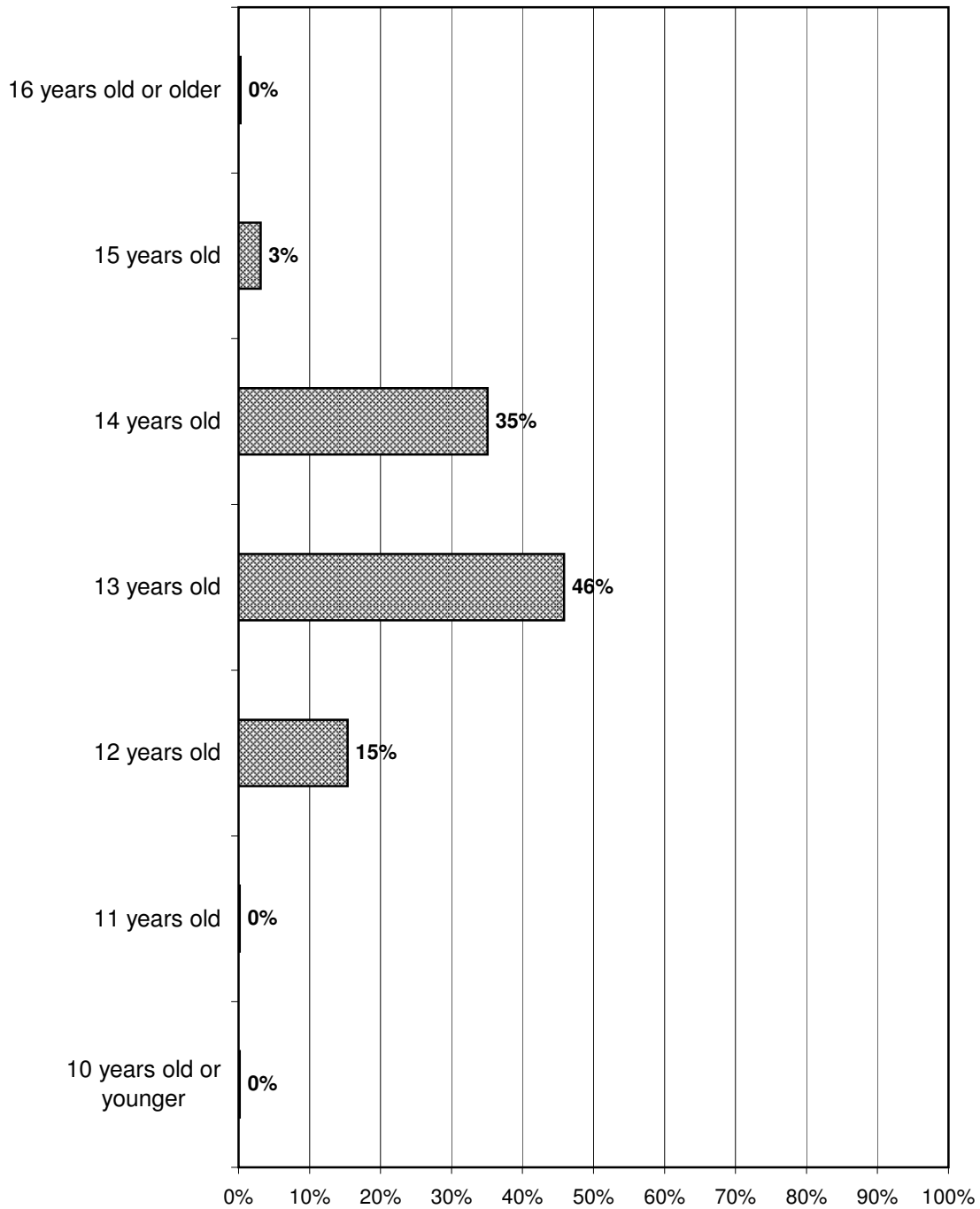


Chart 2
Q-3 In what grade are you?

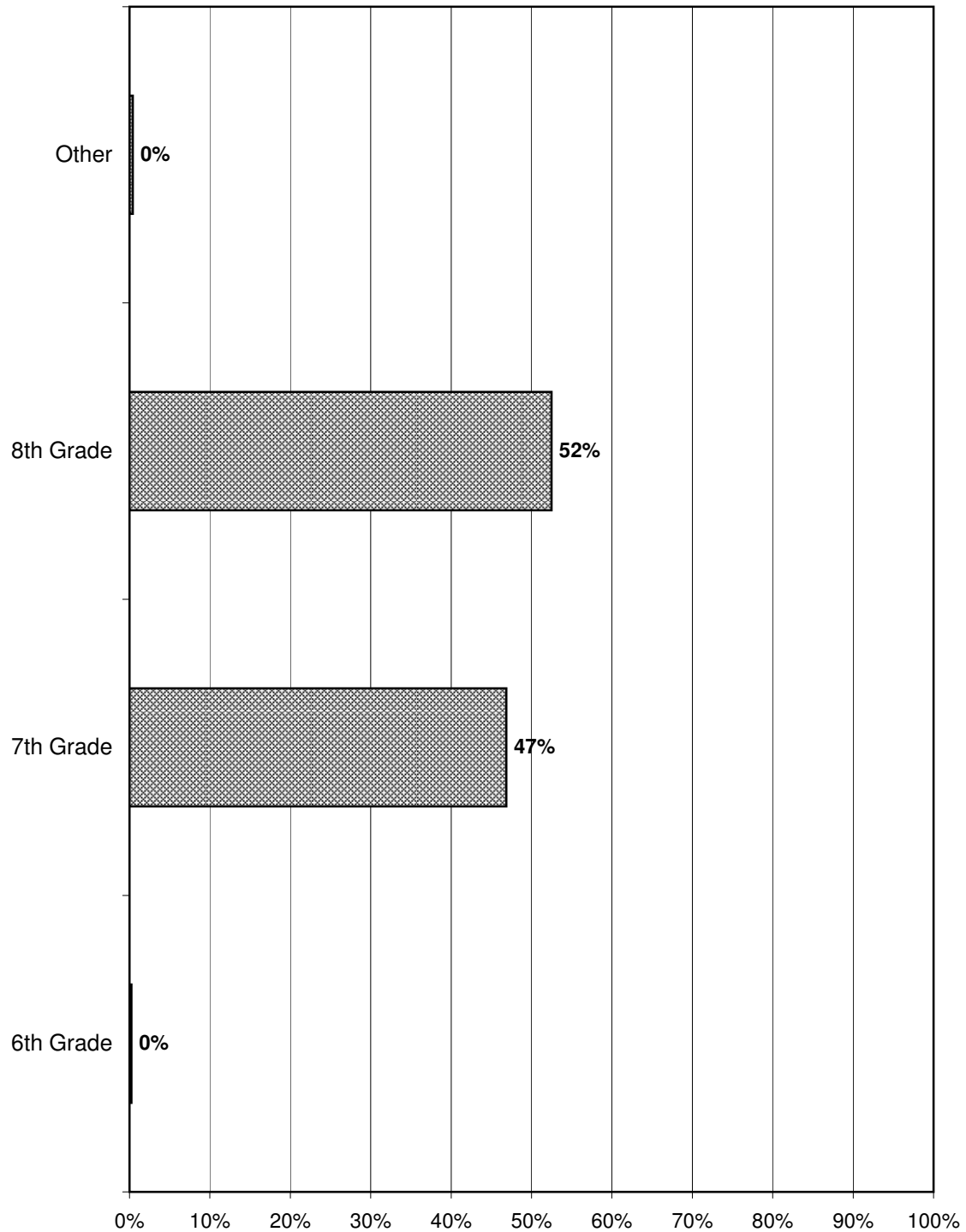


Chart 3

**Q-8 How often do you wear a seat belt when riding in a car
driven by someone else?**

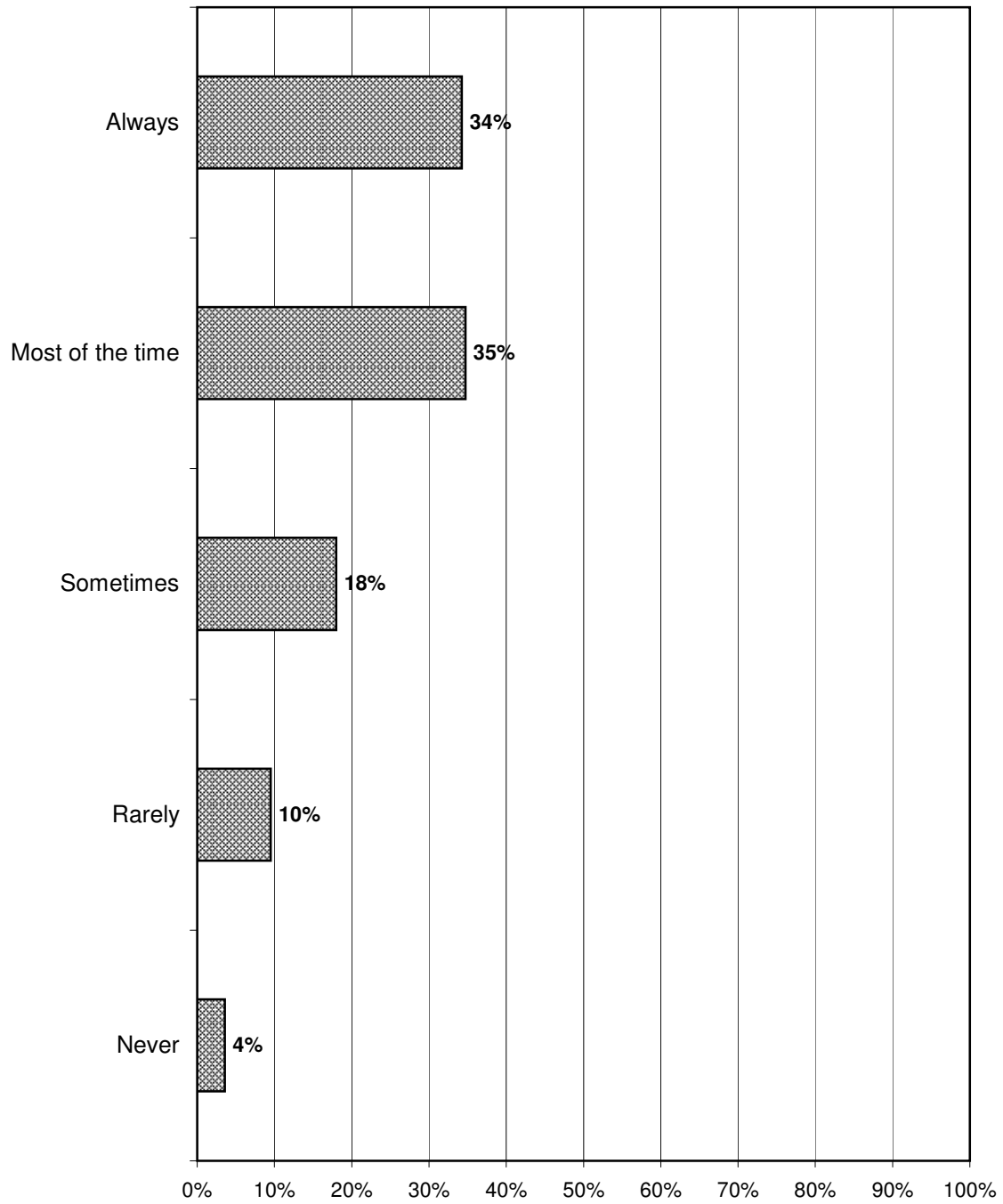


Chart 4
**Q-9 Have you ever ridden in a car driven by someone who
had been drinking alcohol?**

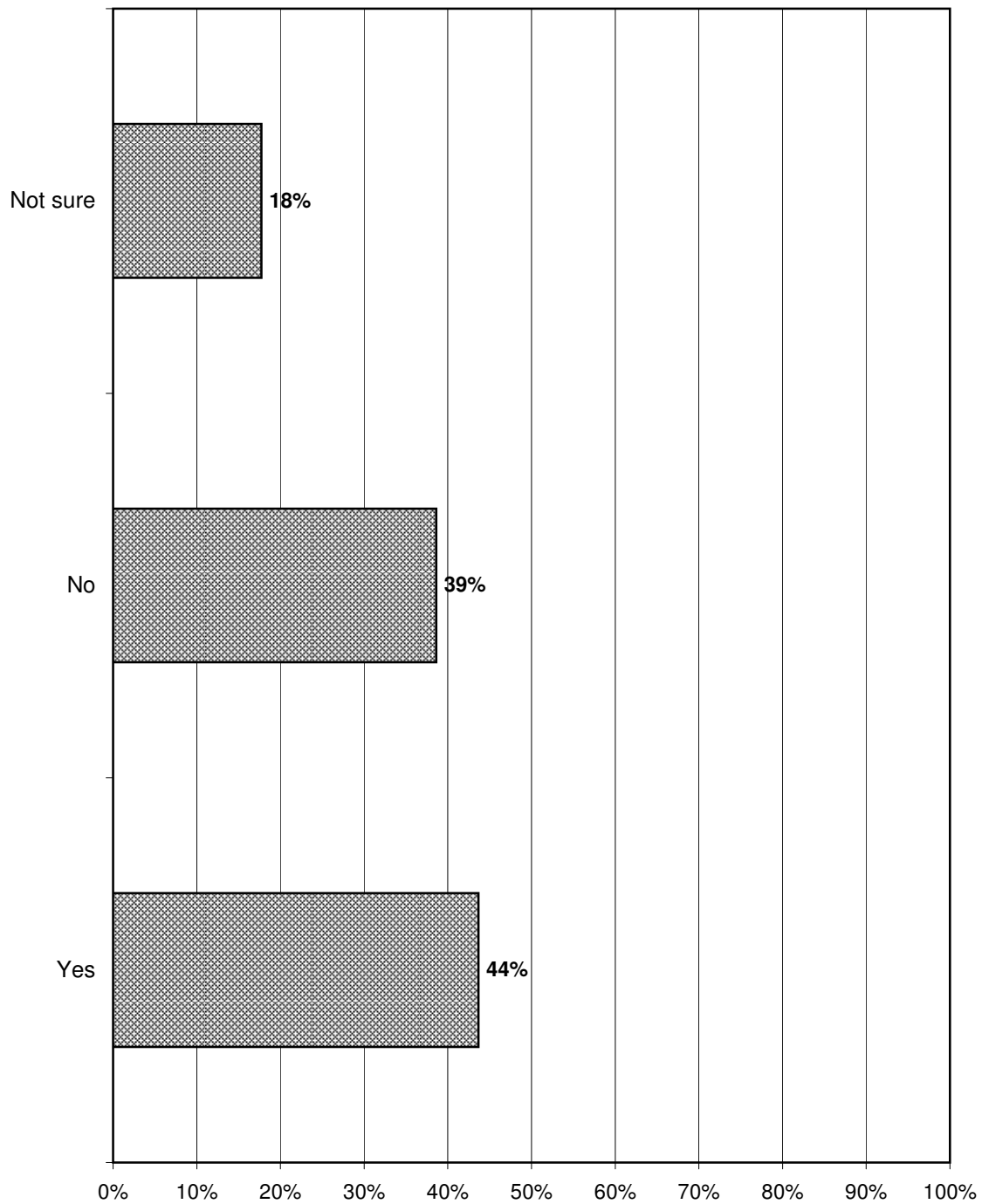


Chart 5

**Q-17 How old were you when you smoked a whole cigarette
for the first time?**

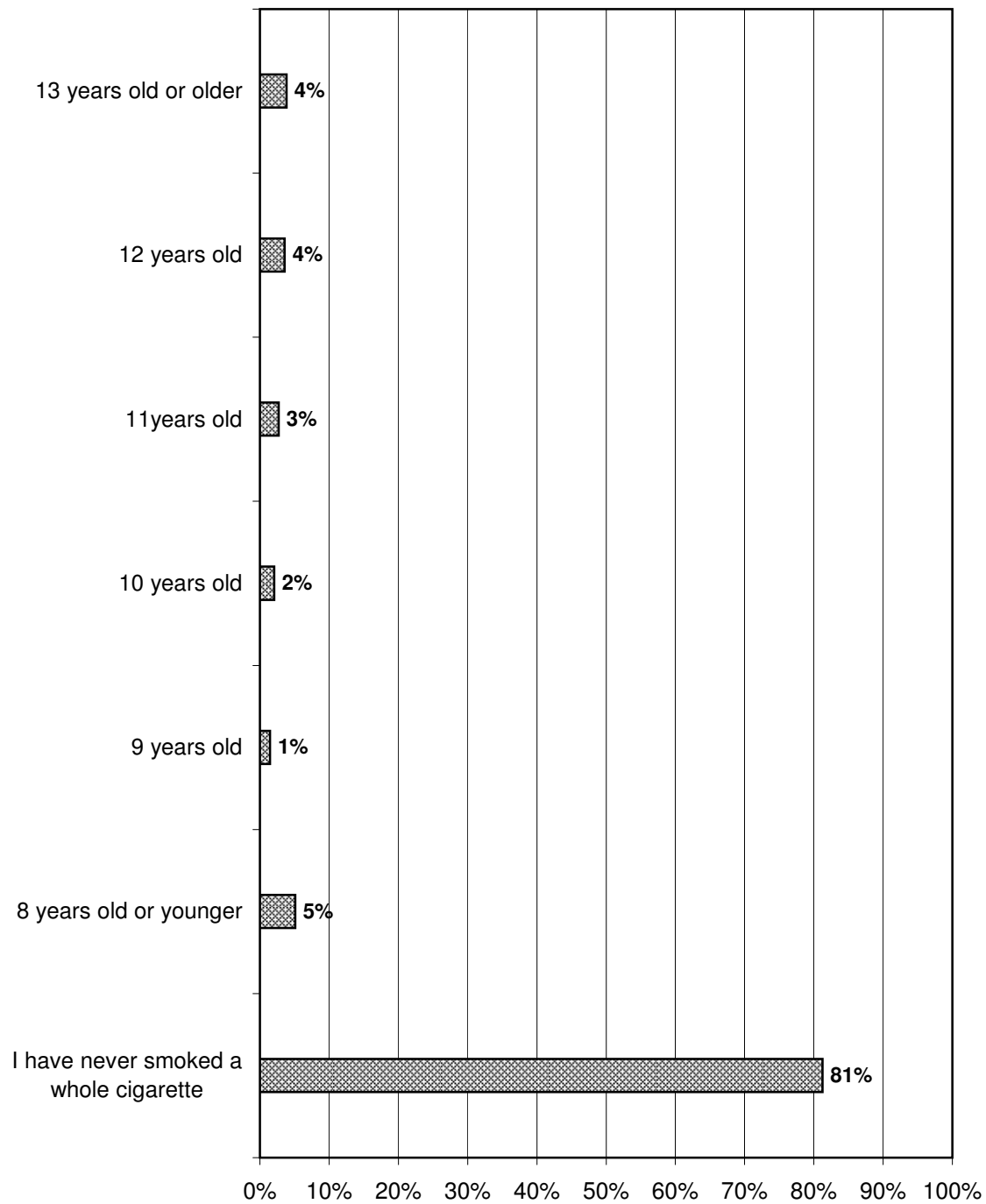


Chart 6

Q-19 During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?

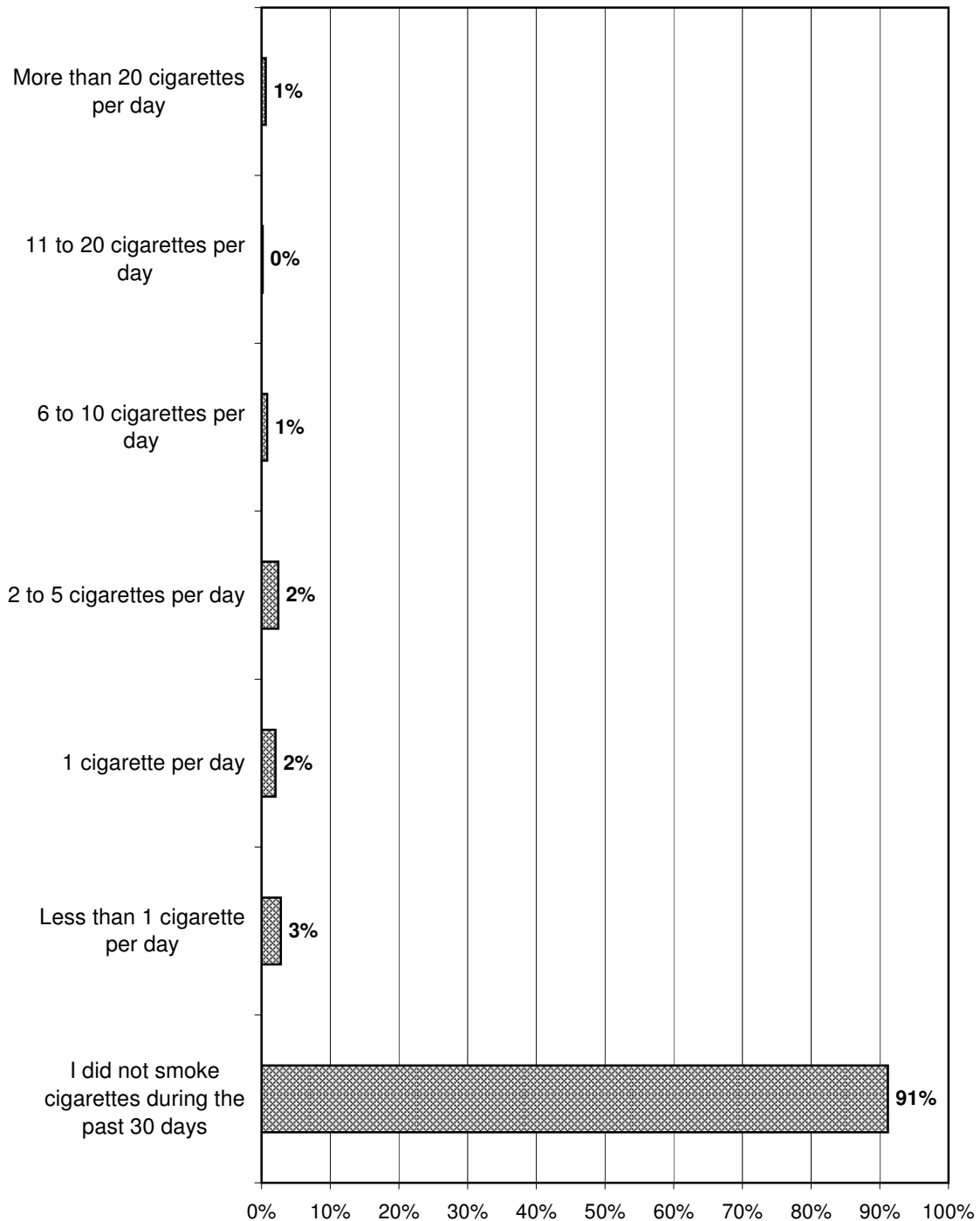


Chart 7

Q-20 During the past 30 days, how did you usually get your own cigarettes?

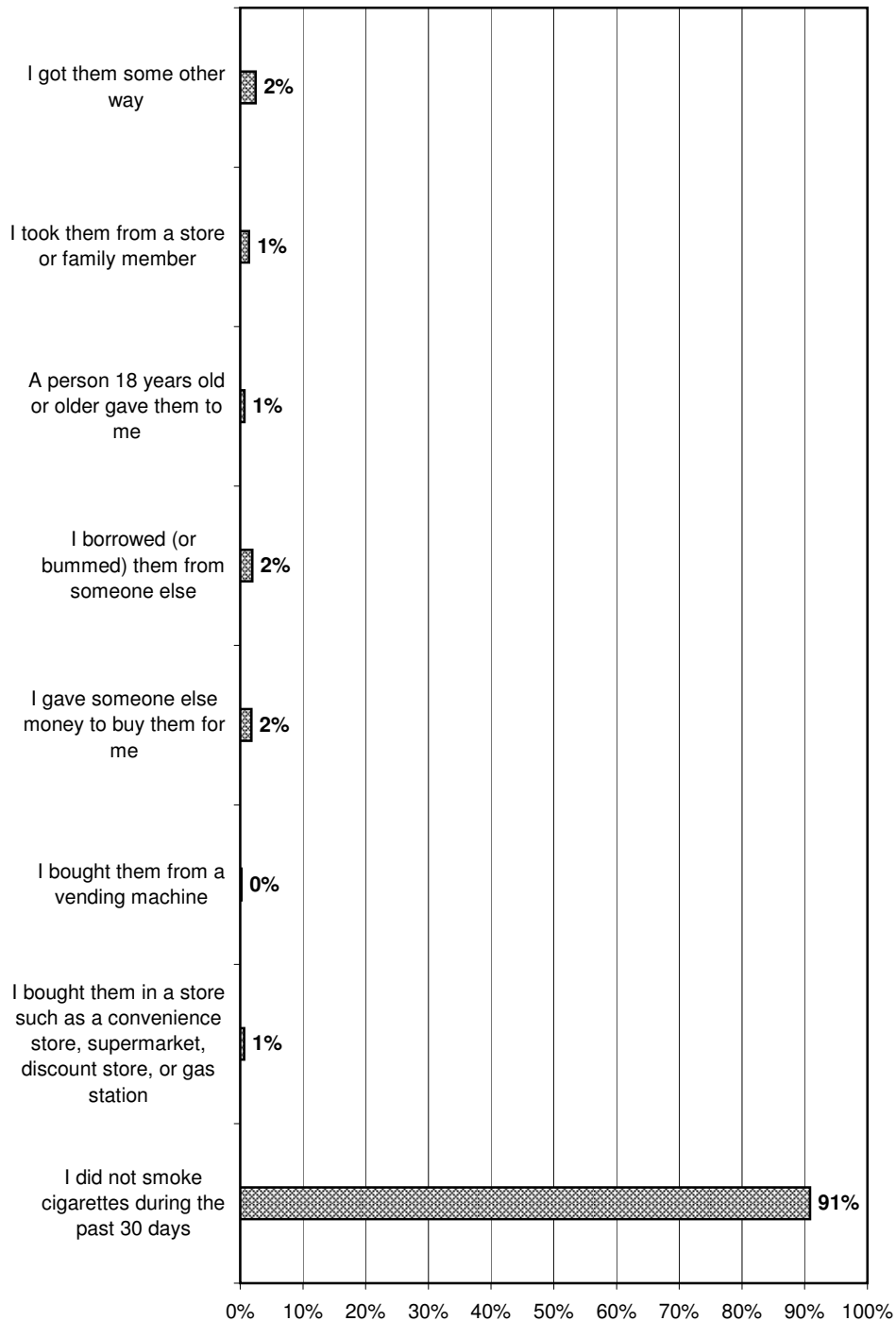


Chart 8

Q-25 How old were you when you had your first drink of alcohol other than a few sips?

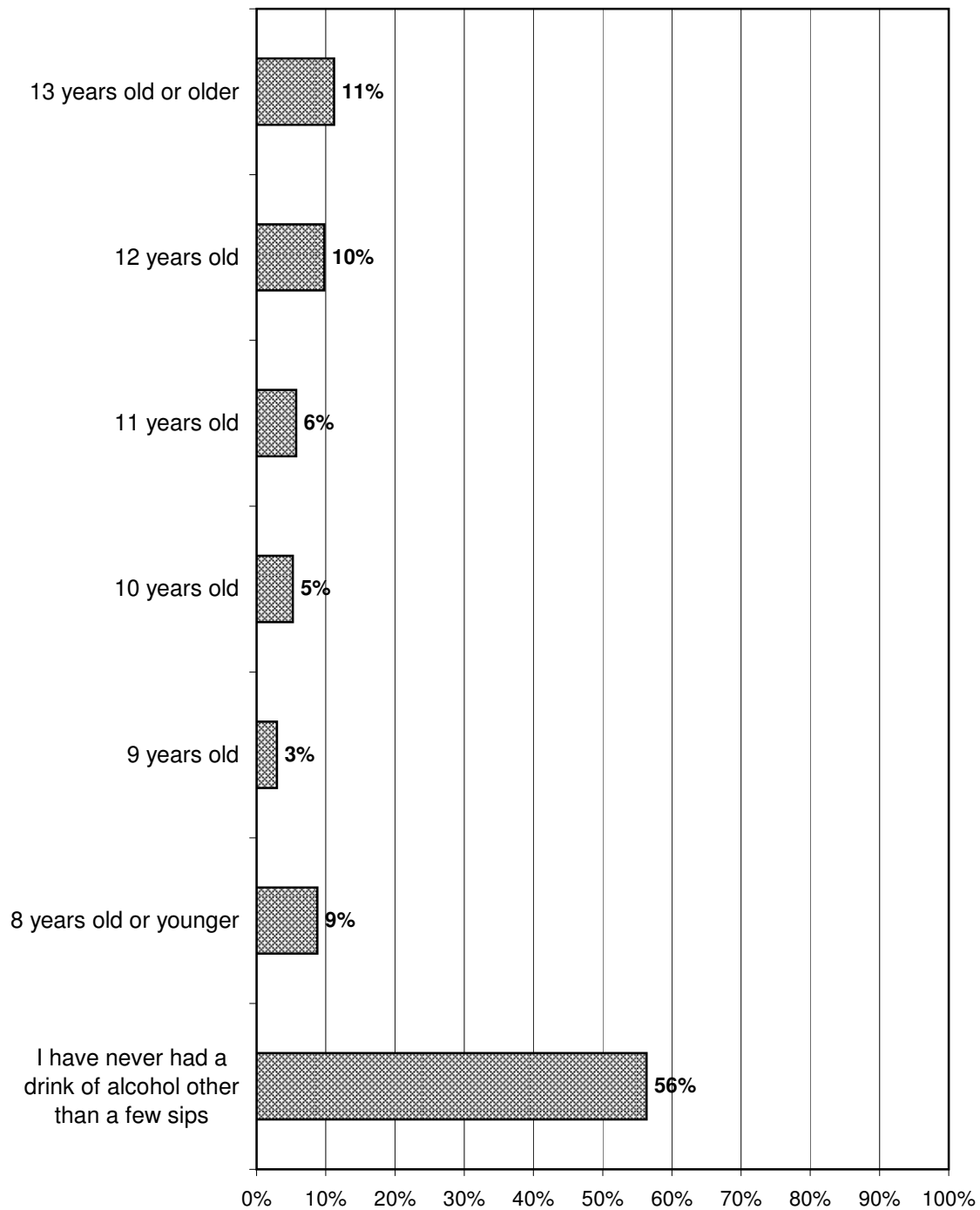


Chart 9

Q-28 How old were you when you tried marijuana for the first time?

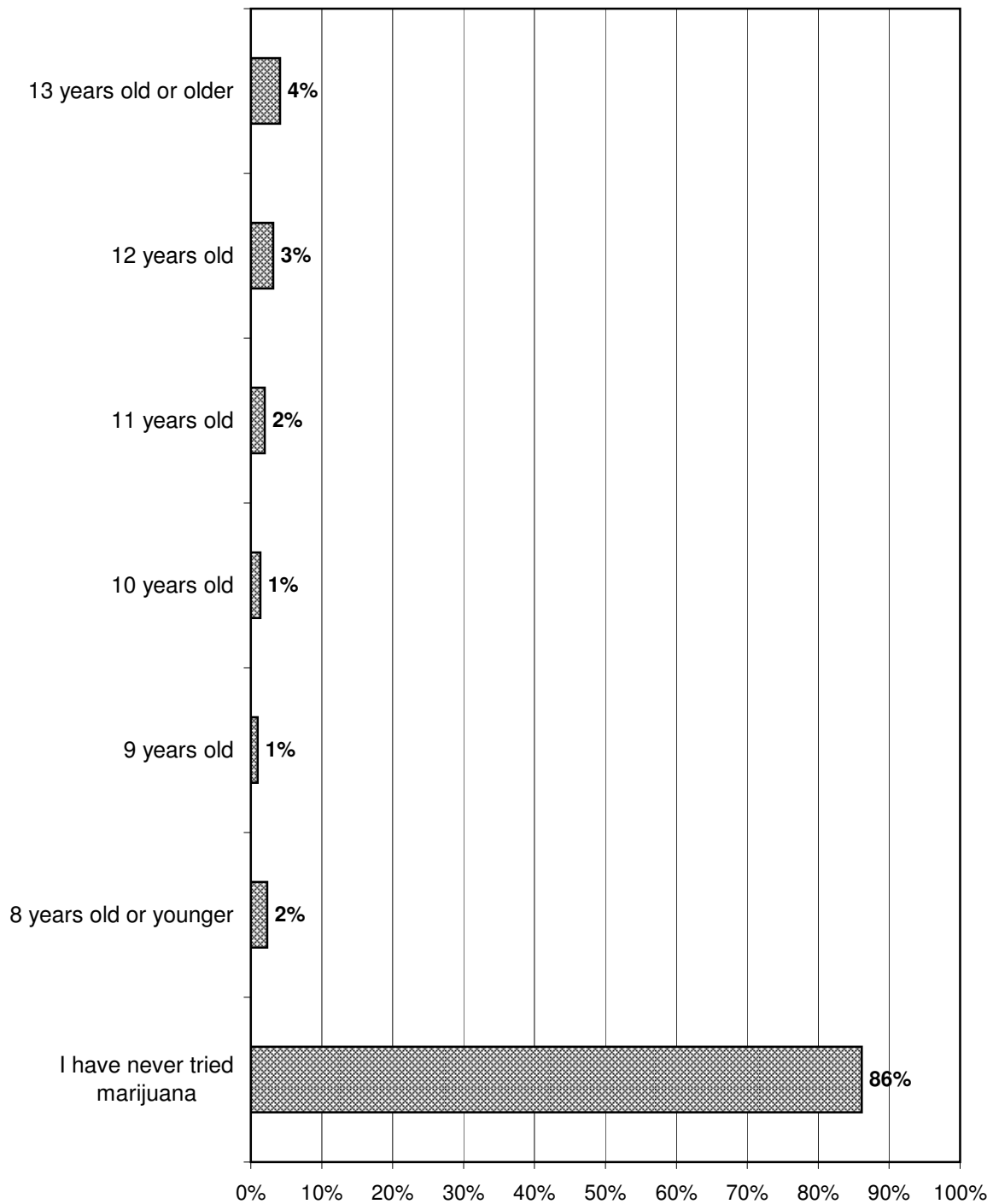


Chart 10

Q-29 During your life, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?

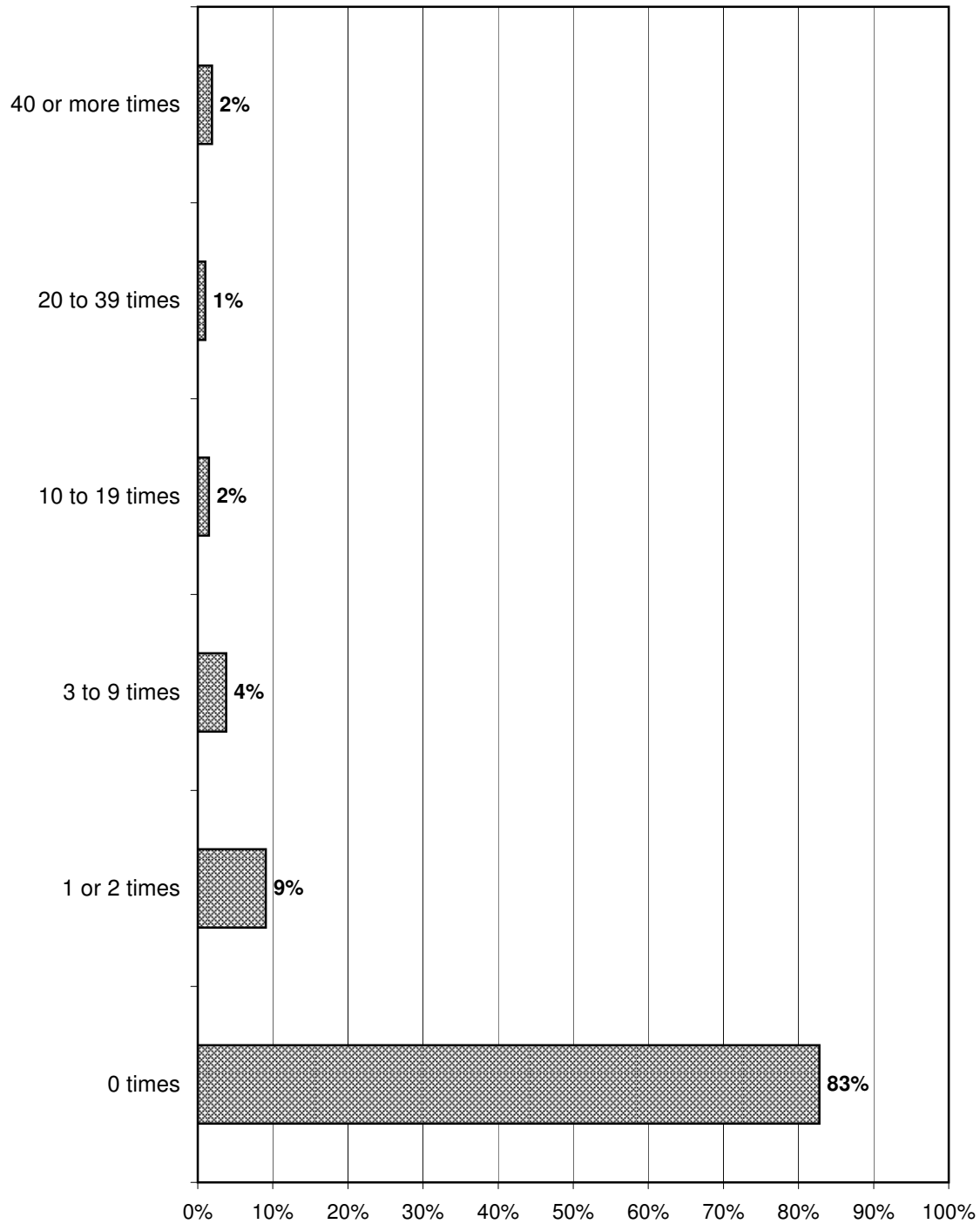


Chart 11

Q-34 How old were you when you had sexual intercourse for the first time?

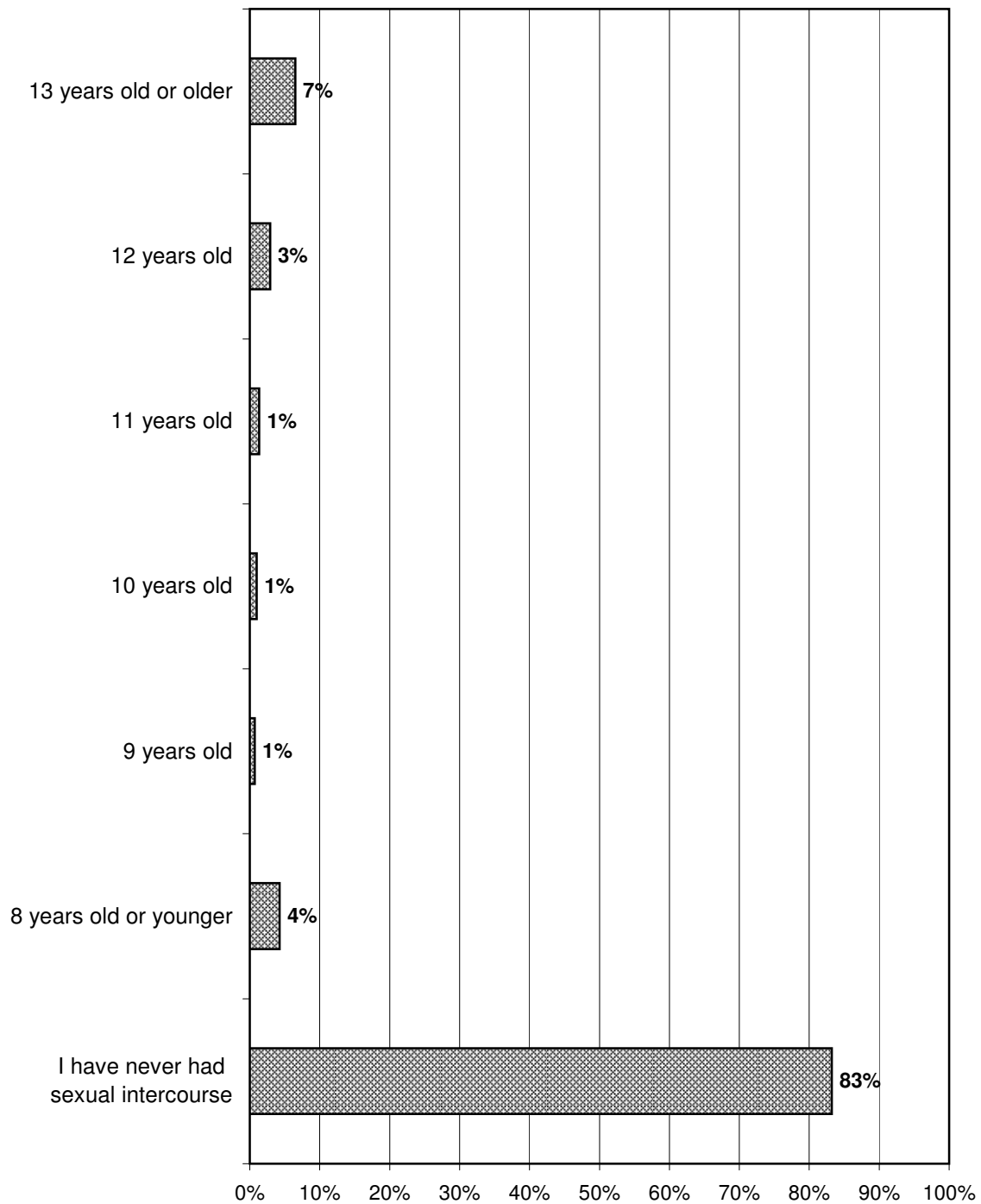


Chart 12

Q-36 The last time you had sexual intercourse, did you or your partner use a condom?

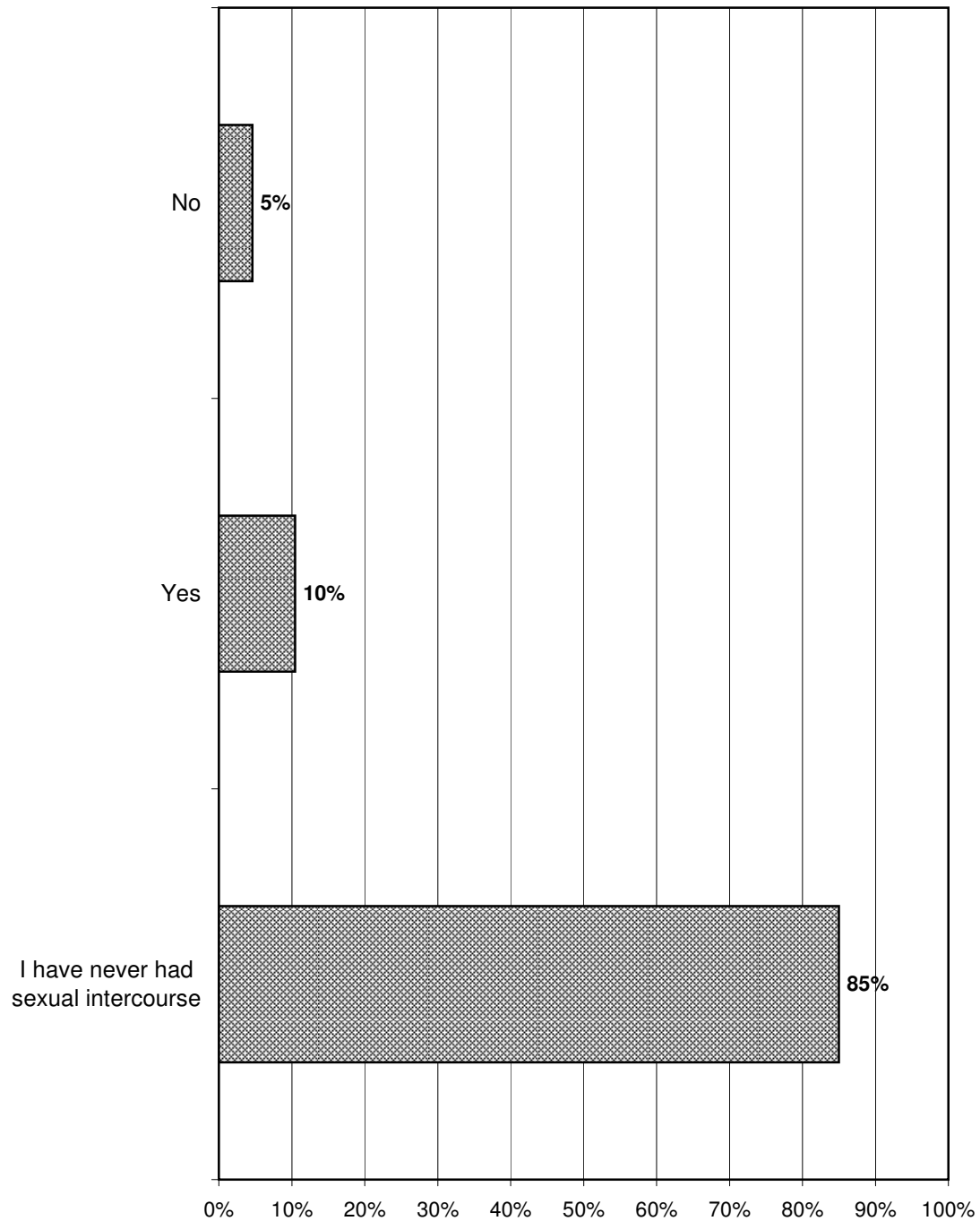


Chart 13
Q-37 How do you describe your weight?

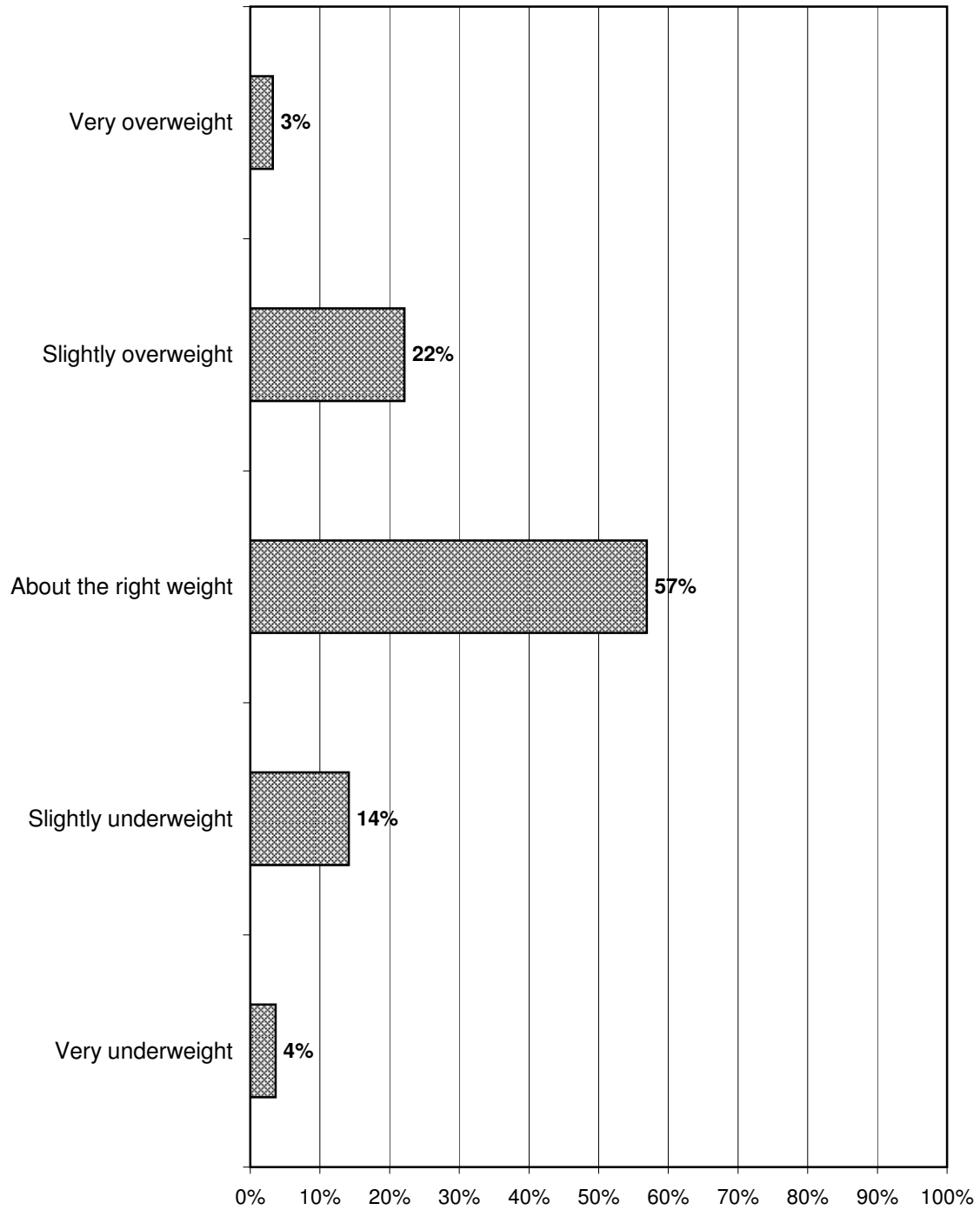


Chart 14

Q-39 Have you ever exercised to lose weight or to keep from gaining weight?

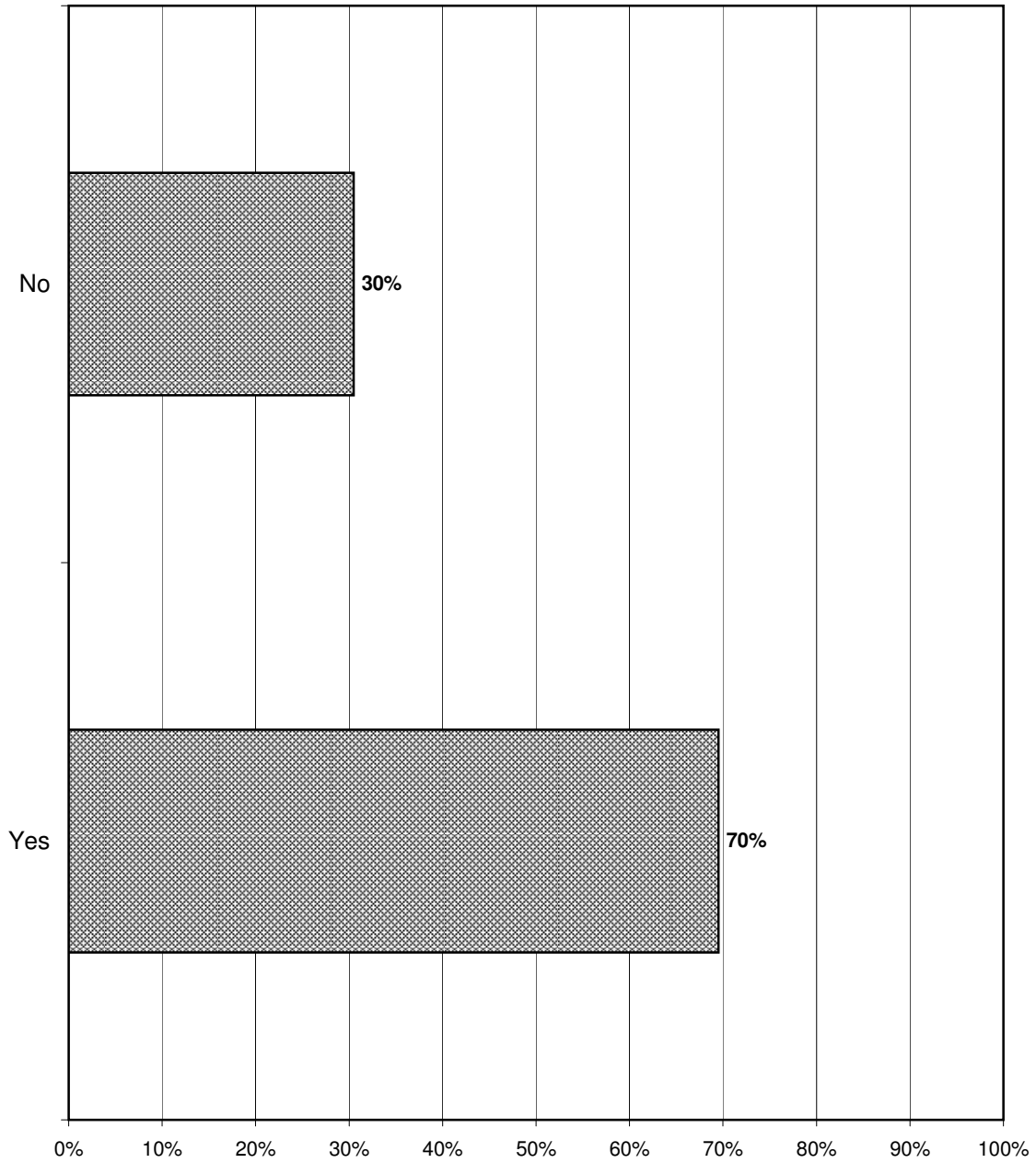


Chart 15

Q-48 During the past 12 months, on how many sports teams did you play? (Include any teams run by your school or community groups.)

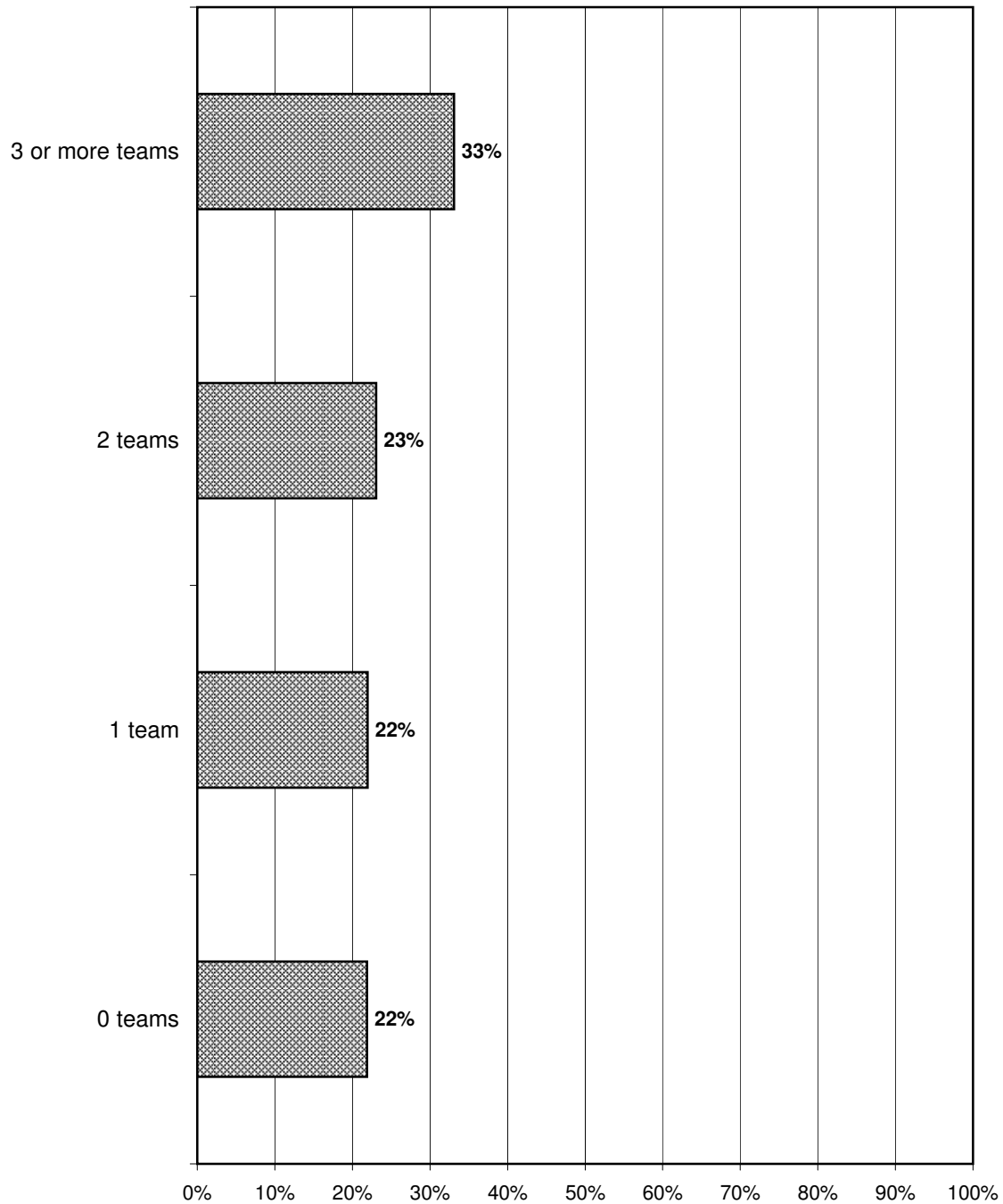
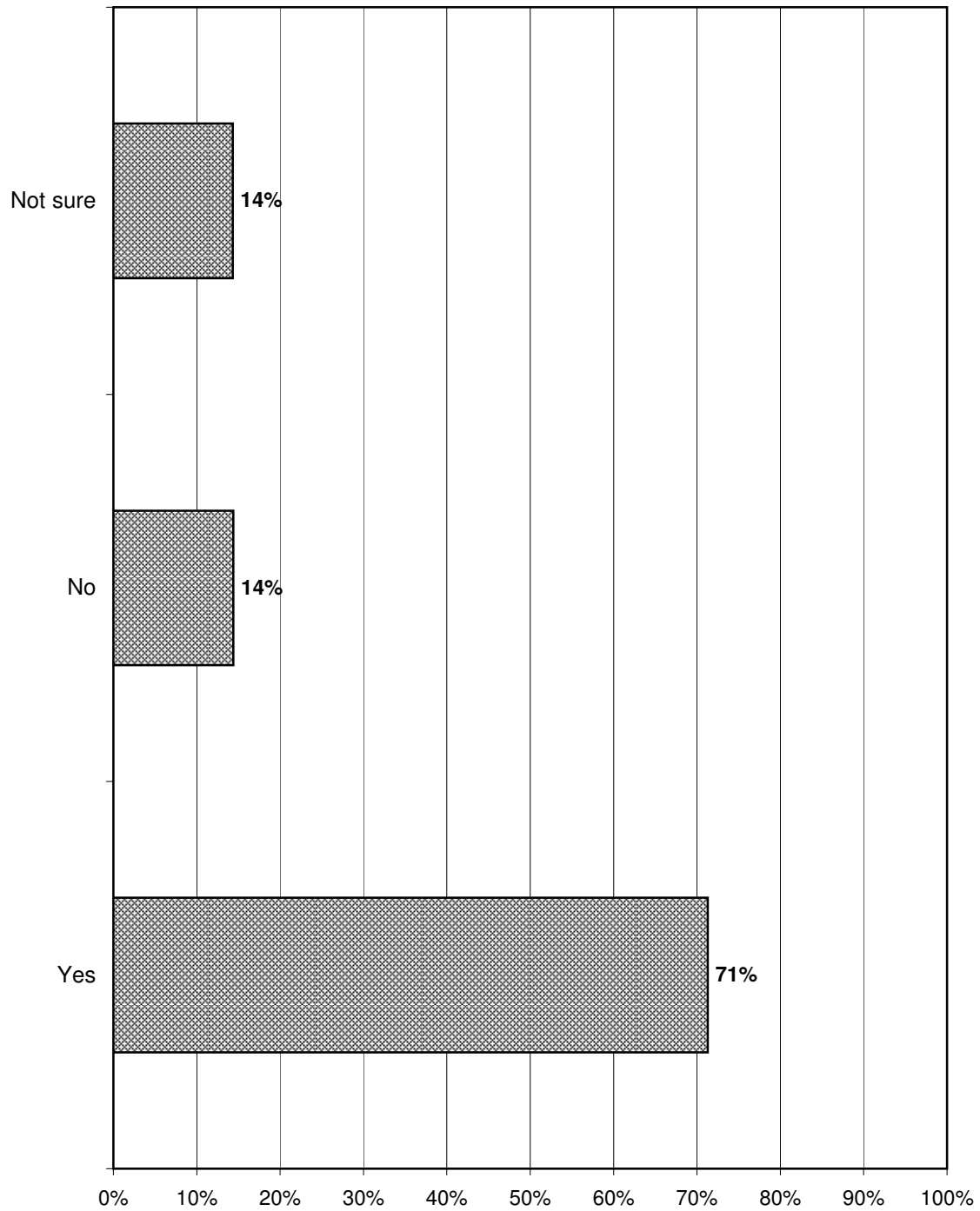


Chart 16
Q-49 Have you ever been taught about AIDS or HIV infection in school?



Montana Office of Public Instruction

Montana Board of Crime Control

Montana Department of Public Health & Human Services

Indian Health Service

Healthy Mothers Healthy Babies

Blue Cross and Blue Shield of Montana

Montana Department of Transportation
Traffic & Safety Bureau

Division of Adolescent and School Health
Centers for Disease Control and Prevention



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